United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N	IDR0500003	160908	~	R	2

Remarks

21 ____ 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
67 150 69	70 4	71 N	72 N	73 ____ 74 75 ____ 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time/Date	Permit Effective Date
Kinross DeLamar and Stone Cabin Mines and Land Application Treatment Site 1 DeLamar Road DeLamar, Idaho 83650	8:50am; 09/8/2016	12/12/2015
	Exit Time/Date	Permit Expiration Date
	6:00pm; 09/08/2016	03/06/2020

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

Steve Smith, Environmental Manager for Reclamation
(208) 583-2511, ext. 213; (208) 850-7394 (cell); steve.smith@kinross.com
Chuck Anderson; Environmental Technician
(208) 583-2511, ext. 220; chuck.anderson@kinross.com

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*

Gold Ores - SIC code1041
MSGP Sector G- Metal Mining,
Sector L - Landfills, Land Application Sites, and Open Dumps

Name, Address of Responsible Official/Title/Phone and Fax Number

Steve Smith, Environmental Manager for Reclamation
P.O. Box 52; Jordan Valley, OR 97910
(208) 583-2511, ext. 213; (208) 850-7394 (cell);
steve.smith@kinross.com

Contacted ☑ Yes ☐ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

☑ Permit	☑ Self-Monitoring Program	☐ Pretreatment	☐ MS4
☑ **Records/Reports**	☑ Compliance Schedules	☐ Pollution Prevention	
☑ Facility Site Review	☐ Laboratory	☑ Storm Water	
☑ Effluent/Receiving Waters	☑ Operations & Maintenance	☐ Combined Sewer Overflow	
☐ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes SEV Description

● ● ● ● ● ● ● ● ● ● _____
● ● ● ● ● ● ● ● ● ● _____
● ● ● ● ● ● ● ● ● ● _____
● ● ● ● ● ● ● ● ● ● _____

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Patrick Stoll	EPA/R10/OCE/MIRE/IOO; (208) 378-5772	2/4/2017
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date
Kimberly A. Ogle	EPA/R10/OCE/MIRE 3-0955	2/14/17

EPA Form 3560-3 (Rev 1-06) Previous editions are obsolete.

ICIS.
09-12-2016
MB~
(per advance copy)

National Pollutant Discharge Elimination System (NPDES)
Compliance Evaluation Inspection Report

Kinross DeLamar Mine
DeLamar, Idaho

NPDES No: IDR050003 - Multi-Sector General Permit for Stormwater Discharges from Industrial Facilities (MSGP)
and
NPDES No: IDG910007 – Groundwater Remediation Facilities General Permit (GWGP)

Inspection date: September 8, 2016
Report completion date: February 6, 2017

Prepared by:

Patrick Stoll
U.S. Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Inspection and Enforcement Management Unit
Idaho Operations Office
950 W. Bannock Street
Boise, Idaho 83702

Table of Contents

Section	Topic	Page No.
I.	Facility Information	2
II.	Inspection Information	2
III.	Owner/Operator Information	3
IV.	Facility Background	3
V.	Inspection Entry	4
VI.	Status Update	4
VII.	Stormwater Management	5
VIII.	Groundwater Treatment	7
IX.	Wastewater Management	10
X.	Site Tour	11
XI.	Closing Conference	12
XII.	Areas of Concern	12
	Photo Log	14

I. Facility Information

Facility Name:	Kinross DeLamar Mine
Facility Location:	1 DeLamar Road DeLamar, Idaho 83650
	Latitude: 42.9994, Longitude: -116.8386
Facility Mailing Address:	Kinross DeLamar Mining Company P.O. Box 52 Jordan Valley, OR 97910
Facility Type:	Gold Ores – SIC code 1041; MSGP Sector G
NPDES Tracking No.:	MSGP - IDR050003 GWGP – IDG910007
Facility Contact(s):	Steve Smith, Environmental Manager for Reclamation Phone: (775) 829-1000, (office) / (208) 850-7394, (cell) steve.smith@kinross.com
	Chuck Anderson, Environmental Technician Phone: (208) 583-2511, ext. 213 chuck.anderson@kinross.com

II. Inspection Information

Inspection Date(s):	September 8, 2016
Inspector(s):	Patrick Stoll, Inspector (lead) EPA Region 10/OCE/IEMU/IOO (208) 378-5772
Entry Time:	8:50 am
Exit Time:	6:00 pm
Weather Conditions:	Sunny, temps in upper 40s to upper 60s (F)
Receiving Waters:	Jordan Creek is the primary receiving water near the Kinross mine. Louse Creek, discharging to Jordan Creek, is also of concern from a pollutant standpoint. Discharges may also flow into Henrietta and Meadows Gulch. Stormwater runoff can potentially transport pollutants from these normally dry gulches into Jordan Creek.

Purpose:	This inspection was conducted to evaluate the facility's compliance status with respect to the Clean Water Act and EPA's NPDES Multi-Sector General Permit (MSGP) and Groundwater Remediation Facilities General Permit (GWGP)
Information sources:	The information in this report was provided by Kinross employees Steve Smith and Chuck Anderson. Additional background information was copied from previous inspection reports including my own report dating back to a July 29, 2014 and a report developed by EPA employee Eva DeMaria documenting an inspection she conducted on June 8, 2009.

III. Owner/Operator Information

This facility is owned and operated by the Kinross DeLamar Mining Company (Kinross)

IV. Facility Background

In her 2009 inspection report, EPA inspector Eva DeMaria noted the following:

> *The Kinross DeLamar and Stone Cabin Mines is an inactive open pit gold mine currently undergoing reclamation. It is located in the Owyhee Mountains at approximately 6,500 feet elevation. In December 1998 mining and milling activities were suspended and the site placed into care and maintenance mode. In 2003, the mines were placed in reclamation status... The facility comprises two separate entities: DeLamar Mine and Stone Cabin Mine. Stone Cabin's pit has been partially backfilled and the mine totally reclaimed. The haul road located between the two mines has also been reclaimed to a more primitive road (16 feet wide). Thus, access to Stone Cabin Mine is limited...The DeLamar side of the facility consists of the administrative buildings, tailings pond, two wasterock dumps, and various treatment facilities*

A number of changes have taken place at the Kinross DeLamar (Kinross) mine since the time of Ms. DeMaria's 2009 inspection. In my July 29, 2014 inspection report I noted that:

> *... there was no longer any free-standing water in the former tailings pond location. As part of the reclamation project, this area was being reclaimed and covered with a clay cap. The four residual flows (wastewater) from the two waste rock dumps, an old adit on the north side of the mine (Adit 16), and discharges from an embankment on the west side of the facility are no longer directed to the tailings pond. Instead, this wastewater is captured and pumped to a treatment plant* [**the "Water Treatment Building"**] *located near the southwest corner of the former tailings pond site. At the treatment plant, the wastewater undergoes pH adjustment with a lime slurry prior to discharge to a lined settling basin. The treated wastewater from the settling basin is pumped into the double-lined, 350-acre-foot capacity (> 114 million gallon) "water management pond" (WMP).*

Photos 1-6 provide a facility overview.

V. Inspection Entry

The Kinross mine is located in a remote high desert area slightly more than a two-hour drive south of Boise, ID. Given the remoteness of the mine and the need to insure that appropriate personnel were on-site at the time of this inspection, I contacted Steve Smith, the Site Environmental Manager for Reclamation, on Friday, September 2, 2016 to schedule an inspection the following week. We agreed to meet near the facility entrance at Jordan Creek the following Thursday at 9:00 am (see Photo 7). I arrived at the meeting location at 8:50 am. Mr. Smith arrived minutes later. After a brief introduction, Mr. Smith led me back up to the reclaimed mine site and the nearly empty project office. Along the way we passed through a locked security gate and drove around the north side of the capped tailings pond.

At the office, I was introduced to Environmental Technician Chuck Anderson. Mr. Anderson is responsible for conducting routine site inspections, conducting all compliance sampling, insuring that all maintenance activities associated with MSGP compliance are completed within the required time frame, submitting discharge monitoring reports to EPA, and updating the Stormwater Pollution Prevention Plan (SWPPP). I told Mr. Smith and Mr. Anderson that one of my goals, in addition to verifying compliance with the MSGP and the GWGP, was to become familiar the changes that had taken place at the facility since my previous visit in 2014.

VI. Status Update

Initial discussions and a subsequent site tour indicated that the following changes have taken place at the Kinross mine since my July 29, 2014 inspection:

- The capping and closure of the former tailings pond is now complete.
- A new, high density polyethylene (HDPE) lined drying pond has been constructed immediately west of (and adjacent to) the settling pond associated with the treatment system. This pond is used to dry the sludge from the settling pond. At the time of this inspection, some of the sludge had been removed with samples collected for Toxicity Characteristic Leaching Procedure (TCLP) analysis to determine whether or not the material would require management as a hazardous waste in accordance with the requirements of the Resource Conservation and Recovery Act.
- As in the past, the treated decant water from the settling/holding pond is pumped into the double-lined, 350-acre-foot capacity water management pond (WMP) described earlier. The amount of wastewater discharged to the WMP appears to be far less than what had been estimated at the time of my previous inspection (i.e., the capping of the waste rock dumps and the tailings pond has led to a significant decrease in the volume of seepage requiring treatment).
- The rock-armored conveyance for delivering stormwater runoff from the capped tailings pond and surrounding area to and through the Cabin Creek

drainage (under construction during my previous inspection) has been completed.

- In recent years an experimental Sulfide Reduction Bio Reactor (SRBR) was constructed near the southern end of WD-2. The SRBD involved two shallow ponds filled with a reducing media. In theory, the chemical/physical process that would take place within the ponds would treat the seepage from WD-2 to a level that would make if feasible for Kinross to apply for an individual NPDES permit that would allow for a discharge from the ponds to Louse Creek. The reliability of the process was never proven. The SRBR was not operating at the time of my July 2014 inspection. By the time of the September 2016 inspection, the ponds had been cleaned out and filled in. All seepage draining into that area was being collected and pumped to the WTB for treatment.
- Kinross had been operating under an administratively extended MSGP (Tracking No. IDR05C177) at the time of the last inspection. The facility applied for coverage under the new 2015 MSGP in December 2015. The facility now has coverage under the new general permit (Tracking No. IDR050003).
- Former Reclamation and Site Manager Larry Perino had been transferred to Kinross operations in Colorado.
- Staff size had been reduced to a very small "maintenance crew" - Environmental Manager for Reclamation Steve Smith, Environmental Technician Chuck Anderson, Equipment Operator Boyd Walker, and Safety Advisor Shari MacKenzie).

Many of these topics will be discussed in detail in subsequent sections of this report.

VII. Stormwater Management – MSGP Tracking No. IDR050003

Stormwater Outfalls

During rainfall and snowmelt events, stormwater runoff is discharged from the Kinross operations at a number of locations (no discharges were observed at the time of this inspection). The numeric designation would seem to suggest that there are eight different outfalls; in reality, there are many more. Three of the numeric designations apply to a general area rather than a specific outfall – both have more specific designations (e.g., 3a, 3b, and 3c) applicable to separate outfalls and/or gulches within the area (see Photos 8-10 for examples).

Outfalls 1 and 2 are associated with the Stone Cabin mine located approximately four miles east of the DeLamar mine (much further by road). I did not visit the Stone Cabin mine during this inspection. In her 2009 inspection report, Ms. DeMaria described the Stone Cabin site as follows:

> *"Stone Cabin's pit has been partially backfilled and the mine totally reclaimed. The haul road located between the two mines has also been reclaimed to a more primitive road (16 feet wide). Thus, access to Stone Cabin Mine is limited..."*

Outfalls 3a, 3b, and 3c are located on the north side of the DeLamar operations. Rock-armored ditches convey stormwater from the northern portion of the site to Jordan Creek. There were no discharges to sample or observe during the time of this inspection.

Outfalls 4a-4f are associated with rock-armored ditches and culverts that pass below the site access road on its western border. Stormwater from these outfalls is discharged to normally dry Henrietta Gulch. From the gulch, stormwater that does not infiltrate is discharged to Jordan Creek.

Outfall 5 receives stormwater runoff from a relatively small area at the southwest corner of the project. Stormwater from this area flows into a small settling pond at the head of a normally dry gulch. From the pond, stormwater can flow down the gulch into Louse Creek which, in turn, flows into Jordan Creek.

Outfall 6 is one of the larger and more significant outfalls at the site. This outfall discharges stormwater runoff from a significant portion of the central part of the reclaimed mine, via Cabin Gulch, to Louse Creek which, in turn, flows into Jordan Creek. Outfall 6 discharges stormwater runoff from a number of locations including reclaimed WD-2; the west side of reclaimed WD-1; access roads; and parking areas near the maintenance, equipment storage, and office area. Outfall 6 also receives stormwater runoff from the capped and reclaimed tailings pond area (see Photo 32-33).

Outfall 7 discharges to Louse Creek (which discharges to Jordan Creek) via Sullivan Gulch. Outfall 7 is located near the southeast corner of the reclaimed mine. Quoting from her 2009 inspection report, Ms. DeMaria noted that Outfall 7 receives stormwater runoff from:

> *"...a reclaimed topsoil pile, reclaimed east slope of WD-1 via engineered channels, access roads, a diversion channel on the east slope of the drainage, and from the original, center drainage that is routed past residual flow collections systems."*

In addition to stormwater runoff, Outfall 7 is also permitted to discharge treated groundwater from the treatment system described in later in this report.

Outfall 8, 8a, and 8b are associated with a land application site located near Jordan Creek, approximately 3.5 miles southwest of the DeLamar mine (see additional discussion in *Wastewater Management* section).

Stormwater Pollution Prevention Plan (SWPPP) Review

The Kinross mine has been subject to the requirements of the MSGP for a number of years. At the time of my previous inspection, the facility was operating under the 2008 MSGP (Tracking No. IDR05C177). In December of 2015, Kinross applied for

coverage under the new 2015 MSGP. The SWPPP that I reviewed as part of the September 8, 2016 inspection was an updated version of the SWPPP that has been in place for a number of years. As required, the SWPPP was updated prior to application for coverage under the 2015 MSGP.

The current version of the Kinross SWPPP appears to be complete and, for the most part, up-to-date. As one might expect, it is a large document. During the course of my review, I noted the following:

- The most recent stormwater training for staff and contractors working at the site was conducted on March 31, 2016. The presentation used during the class (developed by Mr. Smith) was comprehensive and addressed all of the required training components. During my 2014 inspection at the Kinross mine, I had noted that the SWPPP failed to document any recent MSGP training for Chuck Anderson, a key member of the Kinross stormwater team. This documentation was included in the updated SWPPP I reviewed in September 2016.
- The SWPPP includes a number of site maps. Given the complexity of the site and the on-going changes that are taking place, these site maps do not always reflect current conditions on the ground and should be updated on a more frequent basis (handwritten notes on the maps are perfectly acceptable).
- The current map showing the location of best management practices (BMPs) used to control erosion and sedimentation are very general in nature; they use a standard symbol (a dark triangle) and a number to identify a general category of BMPs (see Photos 16-18). These maps are not detailed enough to show the exact location of the BMP placement, or (when appropriate) the number of BMPs within a particular category that have been installed. I recommended that Kinross create a more detailed map (or series of maps) that identify the specific location of BMPs as required by the MSGP.
- All routine site inspections and monitoring was conducted in accordance with the schedule outlined in the MSGP.

VIII. Groundwater Treatment – GWGP Tracking No. IDG910007

In October of 2010, EPA authorized the discharge of treated groundwater at the Kinross mine. The discharge was authorized under EPA's *General Permit for Groundwater Remediation Discharge Facilities in Idaho* (GWGP). Although this general permit expired in 2012, it was administratively extended and groundwater continues to be treated and discharged at Kinross.

The "groundwater" that is being treated and discharged reportedly flows from springs in the Sullivan Gulch area. According to Mr. Smith, the source of the springs can be traced back to the earlier days of mining in Sullivan Gulch when the area was excavated down to bedrock. Fractures in the bedrock reportedly provide a conduit for the discharge of groundwater into an area partway down Sullivan Gulch. It is important to note that the western bank of the upper region of Sullivan Gulch is also the eastern side of WD-1. Wastewater (seepage) from the east side of WD-1 is

collected at various locations and pumped from the Sullivan Gulch area, across the site, to the WTB near the former tailings pond. The groundwater springs described at the beginning of this paragraph occur below the location of WD-1. It would be logical to assume that these springs might be associated with WD-1. Mr. Smith claims that this is clearly not the case. There is, reportedly, a distinct difference in pH and the level of nitrates in the water from the WD-1 seeps and the water from the springs further down Sullivan Gulch - the pH of the wastewater collected in the WD-1 seeps is in the 2.0-2.5 range; the water from the lower springs typically has a pH of 3.5-4.5.

Management of the water from the Sullivan Gulch springs involves an initial collection pond and a treatment pond. The flow through the treatment process is as follows:

1. Water from the springs accumulate in the collection pond (the clear pond on the left in Photo 22).
2. A float activated device pumps water from the collection pond into and through the groundwater treatment building.
3. Inside the treatment building, a 25% solution of sodium hydroxide is injected into the line transporting water from the collection pond (see Photo 23).
4. The water from the collection pond, now containing the sodium hydroxide solution, is pumped from the groundwater treatment building to a manifold distribution system located at the upper end of the treatment pond (see Photo 22). The discharge of treated water through manifold system at the head of the treatment pond provides for greater mixing of the water within the pond.
5. A float-activated pump (mounted on a "barge") pumps water from the opposite end of the treatment pond back through the piping system in the treatment building where pH and temperature are continuously monitored in-line (see Photo 24).
6. Assuming there is sufficient flow in Louse Creek (a transponder in the creek provides for continuous flow measurements with results transmitted to and recorded in the treatment building and a computer-based system back at the treatment plant), the pH adjusted groundwater is discharged to the creek (reportedly located about 3500' downhill at the base of Sullivan Gulch).
7. If the flow of Louse Creek is too low or the temperature of the treated groundwater is too high, the barge-mounted pump in the treatment pond is automatically shut off. As the water level in the pond rises, it flows into a vertical decant pipe (see Photo 24) connected to an adjacent sump or "well can" (see Photo 26). From the well can, the water is pumped to the pump station located further up Sullivan Gulch where it is mixed with the wastewater from the WD-1 seeps and pumped across the site to the wastewater treatment building (WTB).

According to Mr. Smith, the discharge from the treatment system occurs primarily between the months of February and May. Reportedly, the maximum discharge rate during this period does not exceed 100 gallons per minute. By the end of the period, the temperature of the discharge is typically increasing at the same time that the stream flow in Louse Creek is decreasing. To insure there is no exceedance of the GWGP's

19° C effluent limit. the treatment system is reportedly designed to shut off the pump responsible for the discharge to Louse Creek whenever the discharge temperature reaches 17° C. The treated groundwater is then diverted to the Sullivan Creek pump station where it mixes with the seeps from WD-1 and pumped across the site to the WTB.

To insure that the groundwater treatment discharge does not violate pH limits, the pH of the discharge must not be less than 6.5 or more than 9 standard units. A sensor installed in the effluent line from the groundwater treatment system will automatically stop the flow to Louse Creek if the pH of the discharge exceeds the permit limits. Remote telemetry pH monitors are also installed in Louse Creek above and below the discharge location. The results of pH measurements are transmitted to the groundwater treatment building and the computerized system at the WTB. Any monitoring results that are outside the permit limits would immediately cause the pump responsible for the discharge to Louse Creek to shut down.

The administratively extended groundwater remediation permit contains a number of effluent limits applicable to the Sullivan Gulch groundwater discharge. To demonstrate compliance with these limits, Kinross is required to conduct routine sampling and submit Discharge Monitoring Reports (DMRs) to EPA R10 and the Idaho Department of Environmental Quality (IDEQ) on a monthly basis. In preparation for the September 8, 2016 inspection, I utilized two EPA databases (Enforcement Compliance History Online [ECHO] and netDMR) to review the facility's compliance history with respect to the GWGP. I noted what appeared to be a lengthy history of non-compliance associated with a failure to monitor for a required parameter (iron) beginning in November 2014 and a failure to submit any data for the month of January 2016.

During the course of this inspection, I questioned Mr. Smith and Mr. Anderson about the apparent non-compliance associated with the DMRs. Both claimed that there had to be some kind of mistake since they were sure the information had been submitted. They were able to provide documentation that this was indeed the case. With respect to the data missing from the November 2014 DMR, Mr. Anderson was able to provide me with a hard copy of the data for that month. The hard copy included the laboratory analysis for iron. It turns out that missing data issue occurred during the period when the permittees were submitting hard copies of the DMRs to EPA and the data was then entered by hand into the online system in Seattle (permittees now have their own accounts and enter the information directly). The analytical results for iron were inadvertently left off the online version during the data entry process. In a situation like this, EPA's online databases will continue to show that a facility is out of compliance until the initial mistake is corrected.

With respect to the missing DMR for January 2016, the information was inadvertently sent to EPA's Idaho Operations Office (IOO) in Boise rather than the main R10 office in Seattle. I was provided with a copy of the cover letter that accompanied the submission to the IOO. It appears that this issue has been resolved.

IX. Wastewater Management

Wastewater Sources

Acid mine drainage (AMD) or "seepage" is one of the major environmental challenges associated with most metal mining operations. Metal-bearing ores are typically found within sulfide formations. When the sulfide formations are exposed to groundwater or meteoric water (i.e., rainfall, snowmelt) in the presence of oxygen, sulfuric acid is formed. The low pH of the resulting AMD poses a significant threat to aquatic and terrestrial life. Managing this AMD is one of the major ongoing challenges at Kinross. The seepage at Kinross comes primarily from the following sources:

- Waste rock dumps WD-1 and WD-2. Both have been capped with 2 feet of compacted clay and 20 inches of subsoil and topsoil. The cap has reportedly reduced inflows of meteoric water by more than 50%.
- Historic Adit 16, located on the north side of the mine, above Jordan Creek (see Photos 43-45). A bulkhead installed within this adit backs up a significant amount of water within the abandoned mine workings. According to Mr. Smith, Kinross staff have determined, through a process of trial and error, that there is an optimum level of water to be maintained behind the bulkhead. If the amount of water is allowed to drop below a particular level, the mine ends up producing a higher volume of wastewater that must be treated. The optimum level reportedly equates to a pressure of 126 pounds per square inch or a head of approximately 290' behind the bulkhead. To maintain this level, a float-activated pump delivers wastewater from the adit to a pump station located near the northwest portion of the site (the "Meadows" area); from there, the wastewater is pumped to the WTB.
- West side embankment. An underdrain has been installed in what is referred to as the "west side embankment" that serves as the elevated border on the west side of the site. Seepage from the underdrain reports to the *Meadows Pump House*. From there, it is pumped to the WTB for treatment.
- Tailings pond collection system. An underdrain was installed within the tailings pond prior to capping as part of site remediation. All seepage collected in the underdrain reports to the *Tails Collection Pump House* (see Photos 29 and 31). From there, it is pumped to the WTB for treatment.
- Sulfide Reduction Bio Reactor (SRBR) collection system. The SRBR was originally constructed near to toe of WD-2. Now that the SRBR has been decommissioned (cleaned out and filled in), the seepage collected in this area is pumped to the WTB for treatment.

At the WTB, the wastewater from the various seepage collection systems undergoes pH adjustment utilizing a lime slurry prior to discharge to a lined settling basin. The treated wastewater from the settling basin is pumped into a double-lined "water management pond" (WMP). The WMP has a design capacity of 350 acre-feet (> 114 million gallons). At the time of this inspection, the annual discharge to the WMP has reportedly dropped to 210 acre-feet per year (< 70 million gallons). Management of the

wastewater from the pond involves a combination of land application and evaporation. The WMP was almost empty at the time of my visit.

Wastewater Land Application

Kinross made the decision to close and remediate both the DeLamar and the nearby Stone Cabin mine in the late 1990's. One of the challenges associated with the mine closers involved the post-treatment management of the estimated 2,500 acre-feet of water in the DeLamar tailings pond (all mine-related wastewater from the Stone Cabin mine was also delivered to the DeLamar tailings pond). After exploring and ruling out underground injection and/or discharging the treated wastewater to Jordan Creek, the company decided to focus on land application. The most likely location involved a 420-acre site on private land located about 3.5 miles from the mine, on the opposite side of Jordan Creek (see Photo 45-46). Routing the 10" HDPE pipe to the land application site involved crossing Jordan Creek and 6000' of land managed by the Bureau of Land Management (BLM). Approval of the site required the development of an Environmental Assessment (EA) by the BLM and authorization by the Idaho Department of Environmental Quality (IDEQ) and the Idaho Department of Lands (IDL). Though mining wastewater is exempt from IDEQ's reuse permit requirements (applicable to most other facilities utilizing land application for wastewater management), the agency did (and still does) require extensive physical and biological monitoring. Monitoring results are submitted regularly to IDEQ in the form of an annual report.

At the time of my June 2014 inspection, Mr. Smith told me that Kinross had concerns about water balance issues and the capacity of the 350 acre-foot water management pond (WMP). At that time, the lease for the land application site was due to expire in less than 2 years and the volume of treated wastewater delivered to the WMP each year would likely exceed the pond's capacity. At the time of this inspection, the water balance concerns were no longer an issue. The lease for the land application site has been extended and, with the capping of the former tailings pond, the volume of wastewater (seepage) requiring treatment has dropped significantly.

X. Site Tour

By midafternoon I competed my review of the paperwork associated with the MSGP and the GWGP. I asked Mr. Smith and Mr. Anderson to provide me with a tour of the site. Over the course of the next three hours we visited most of the operations we had discussed during the first part of the inspection. This included the following locations:

- Sullivan Gulch – including the pumphouse responsible for delivering the collected seepage from WD-1 to the WTB and the groundwater treatment system (see 19-20).
- Stormwater conveyances along the surface of WD-1 and WD-2 (see Photos 27-28).
- The stormwater conveyance responsible for collecting and delivering

stormwater runoff from the surface of the capped tailings pond down and through Cabin Gulch and the Cabin Creek drainage (see Photos 32-33).

- The capped and vegetated surface of the 168 acre tailings pond and the tails collection pump house responsible for delivering the seepage (wastewater) to the WTB (see Photos 30-31).
- The WTB, including all treatment and monitoring equipment (see Photos 34-37).
- The settling/holding pond associated with the WTB (treated wastewater is discharged to this pond to allow for the settling of solids; see Photo 38).
- The new sludge drying pond used to manage the sludge removed from the settling/holding pond (see Photos 39-40).
- Stormwater discharge locations on the west side of the mine site.

XI. Closing Conference

We completed the site tour a 5:30 pm and returned to the Kinross office for a closing conference. As part of the inspection overview, I noted that reclamation of the Kinross mine was obviously a complex project and would clearly require ongoing attention for an indefinite period of time. I stressed the importance of managing stormwater runoff separate from mine wastewater to avoid any comingling of the two. I also stressed the importance of continuing with all compliance monitoring and inspections required by the MSGP and the GWGP. With respect to any deficiencies or areas of concern, I offered the following reminders:

- The SWPPP (particularly the site map) must be updated routinely as conditions on the ground change. All updates can be recorded by hand.
- The SWPPP's site map needs greater detail to show specific locations were BMPs have been installed, added to, or removed.
- During the course of conducting routine facility inspections, when issues are noted that require some type of corrective action, you must note the specific date that corrective actions were implemented in order to verify compliance with the corrective action requirements in Part 4.3 of the 2015 MSGP.

Beyond the items noted above, I told Mr. Smith and Mr. Anderson that the site appeared to be well managed and operated. I also made a commitment to follow-up on what appeared to be deficiencies associated with the two DMR issues noted in Section VIII, Groundwater Treatment. I thanked both gentlemen for their time and left the site shortly after 6:00 pm.

XII. Areas of Concern

The Kinross mine was in the final stages of remediation when I conducted my September 8, 2016 inspection. Given the amount of work that has been required to bring the facility to this stage in the process, and the complexity of stormwater, groundwater, and wastewater management issues, the facility appeared to be well managed and in good condition going into the winter months. With respect to

paperwork, additional attention should be paid to the following:

- Keeping the site map current (challenging when conditions on the ground are changing almost day-to-day).
- Providing greater site map detail with respect to specific locations where BMPs are installed.
- Noting the specific day (not just month) when maintenance activities are performed.

The small Kinross staff seem to be very attentive to the operation, management, and monitoring of conditions on the ground. To ensure that everything is functioning properly, Kinross has installed a sophisticated Supervisory Control and Data Acquisition (SCADA) software/hardware system. The main control center for the SCADA system is located in the WTB. It allows the operator to monitor, collect, and process compliance and operational data from locations around the site. The human-machine interface (HMI) software allows the operator to manually or automatically control valves, pumps, motors, and monitoring equipment from a remote location to insure safe operation and compliance with all permit requirements. As the Kinross staff demonstrated the abilities of the SCADA system to me, I realized that the information associated with Adit 16 did give me some concern. The system is currently set to allow almost 300' of head (126 psi) to build up behind the Adit 16 bulkhead. Given the fact that Adit 16 is associated with one of the lowest levels in the mine, and the fact that the historic mine workings associated with it are probably quite extensive, the pressure reported by the SCADA system could conceivable represent a very significant volume of untreated mine water.

Kinross DeLamar Mine
DeLamar, Idaho
Report Completion Date: 2/4/2017

Inspector:

Patrick Stoll, EPA/R10/IOO
Lead Inspector

Attachment A – Photo Log

Kinross DeLamar Mine– Photo Log
MSGP & GWGP Compliance Evaluation Inspection; September 8, 2016

Inspection site or facility name:	Kinross DeLamar Mine
Physical Location:	1 DeLamar Road DeLamar, Idaho 83650
NPDES ID #:	MSGP tracking #: IDR050003 GWGP tracking #: IDG910007
Type of Inspection:	MSGP & GWGP Compliance Evaluation Inspection
Date of Inspection:	September 8, 2016
Inspector(s):	Patrick Stoll, EPA/R10/MIRE/IOO
Image capture device:	Panasonic Lumix DMC-TS4
Original file type, pixel dimensions, and file #s, (assigned by camera):	JPG; 4000 x 3000 pixels; Image numbers P1020371 through P1020443
Photo Log Image ID #s:	Images numbered: 1-46
Digital images recorded by:	Patrick Stoll unless otherwise noted e.g., Google Earth)
Drainage/flow direction:	→

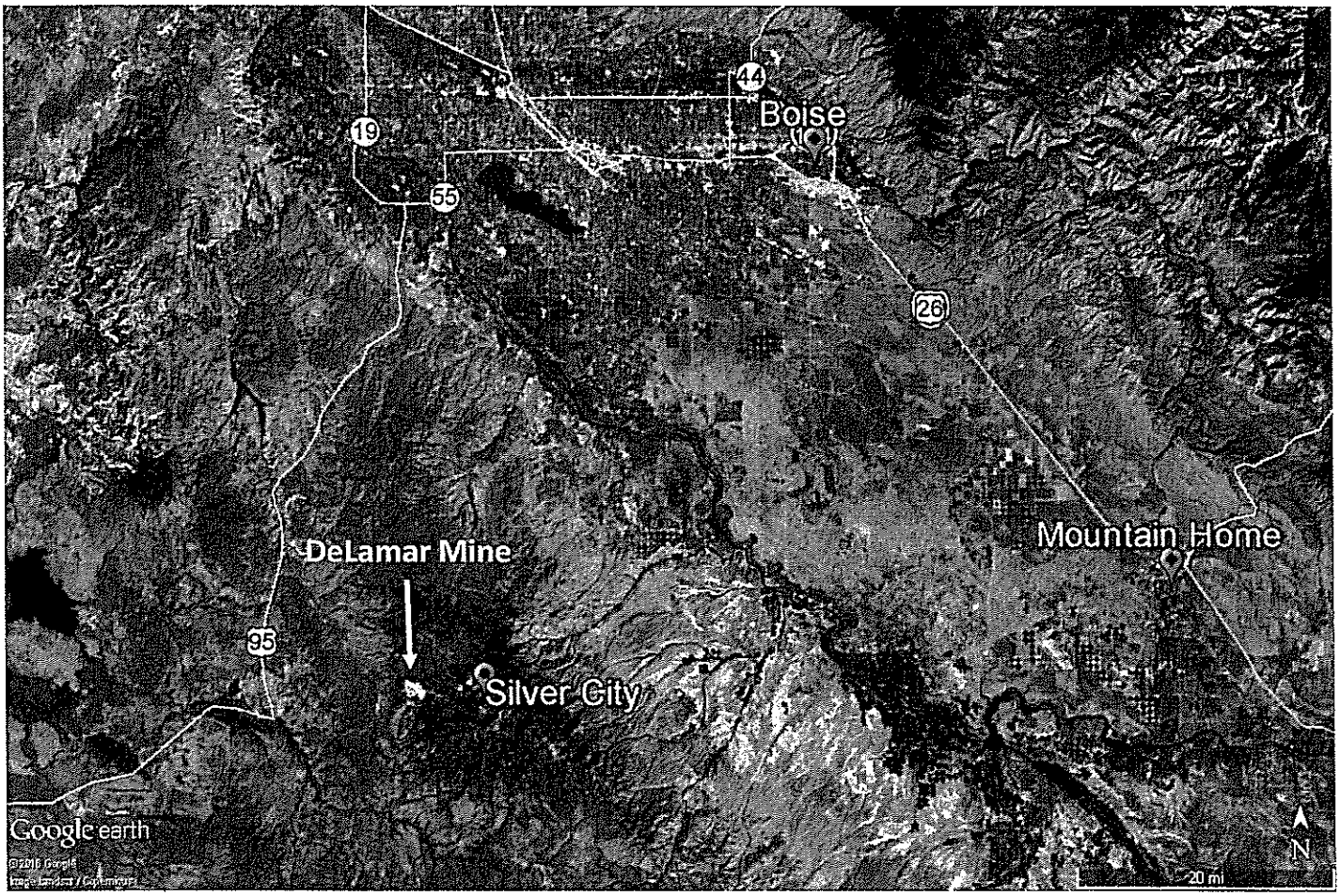


Photo No.1 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Location of DeLamar Mine in relation to City of Boise and Silver City

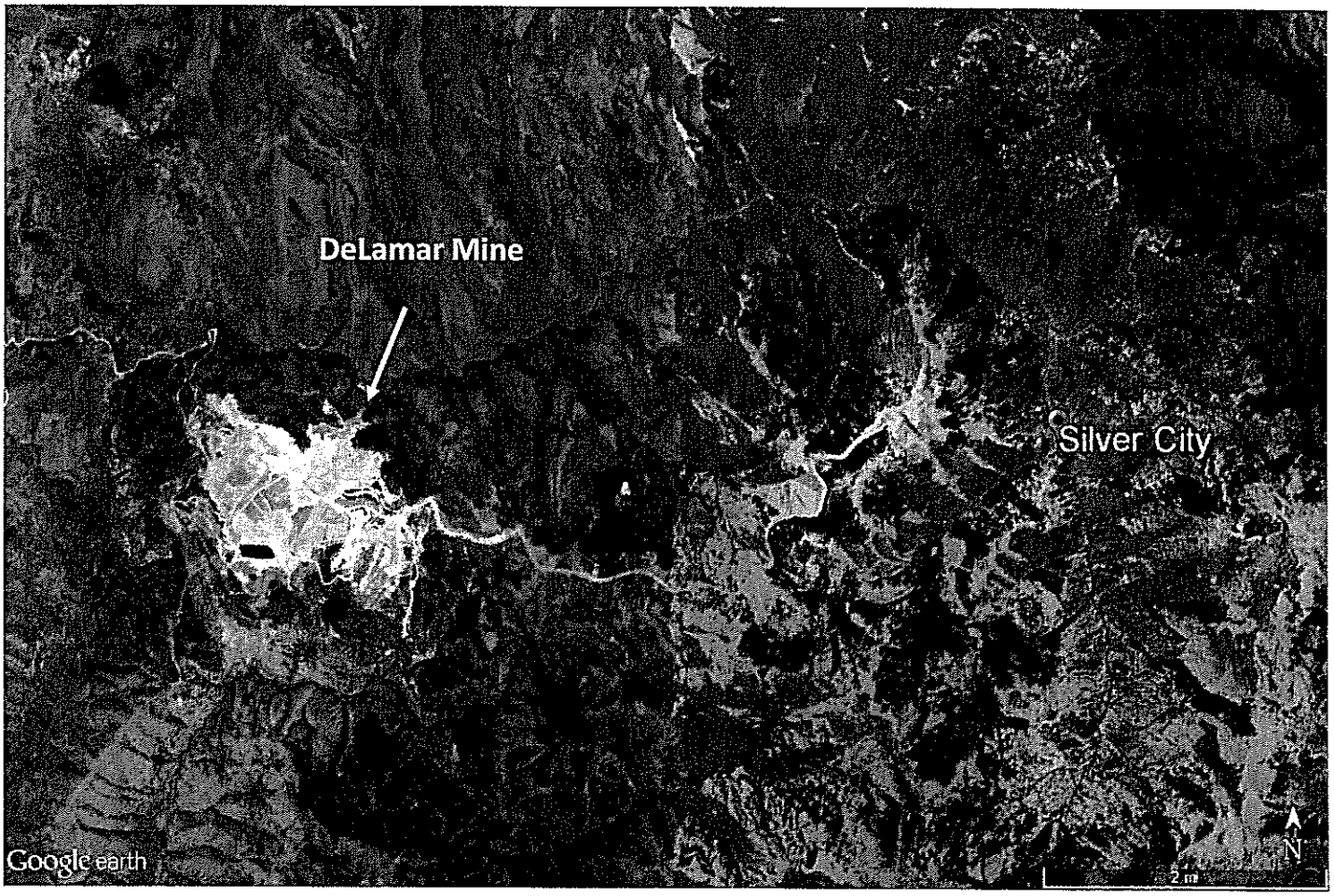


Photo No.2 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016 and 4/11/2014)
Location of DeLamar Mine in relation to Silver City

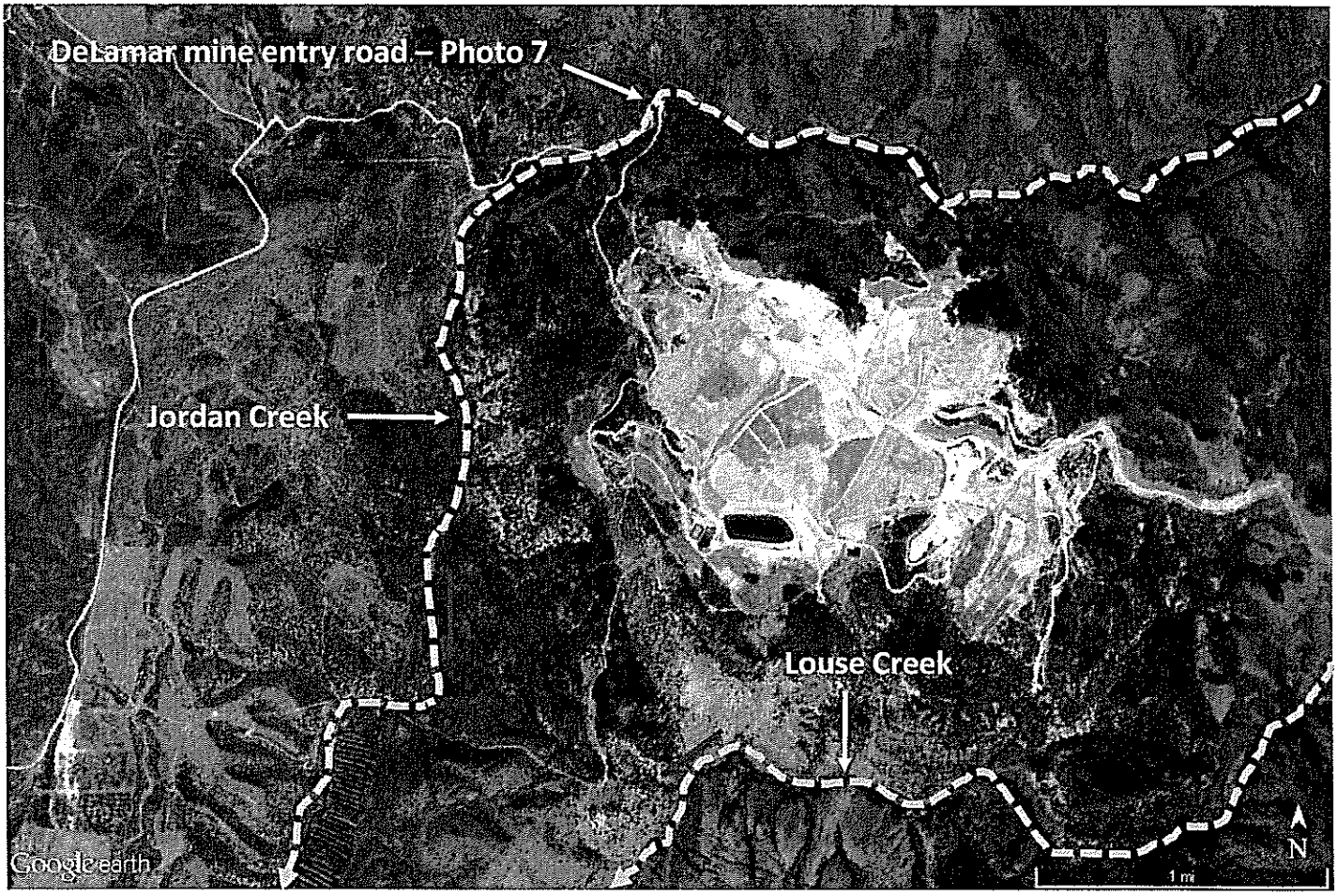


Photo No.3 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Surface water near DeLamar Mine

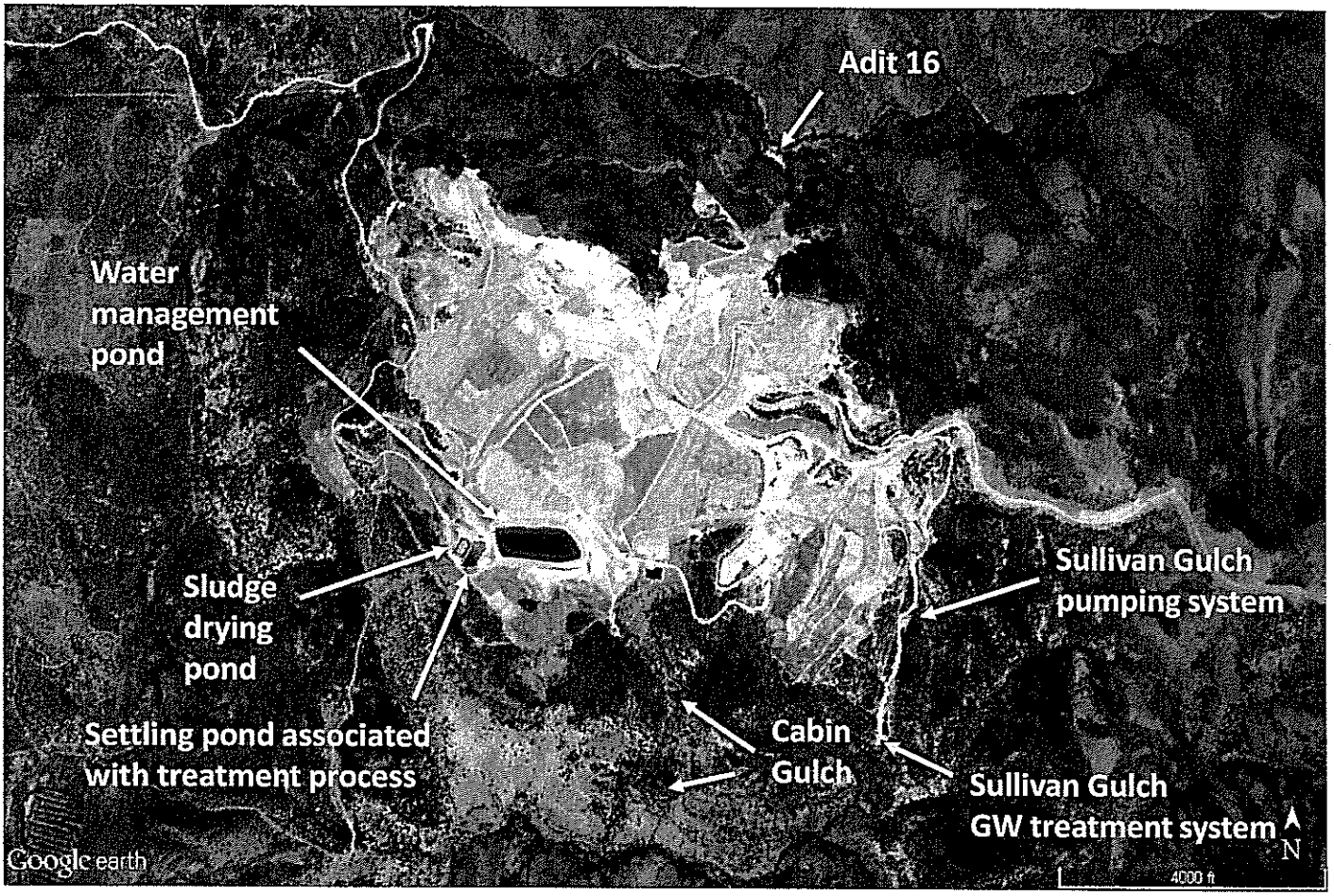


Photo No.4 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Aerial image noting key water treatment features

Kinross DeLamar Mine– Photo Log
MSGP & GWGP Compliance Evaluation Inspection; September 8, 2016

Photo No.5 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Details of wastewater treatment system

Photo Log – Kinross DeLamar Mine
MSGP Compliance Evaluation Inspection; July 29, 2014

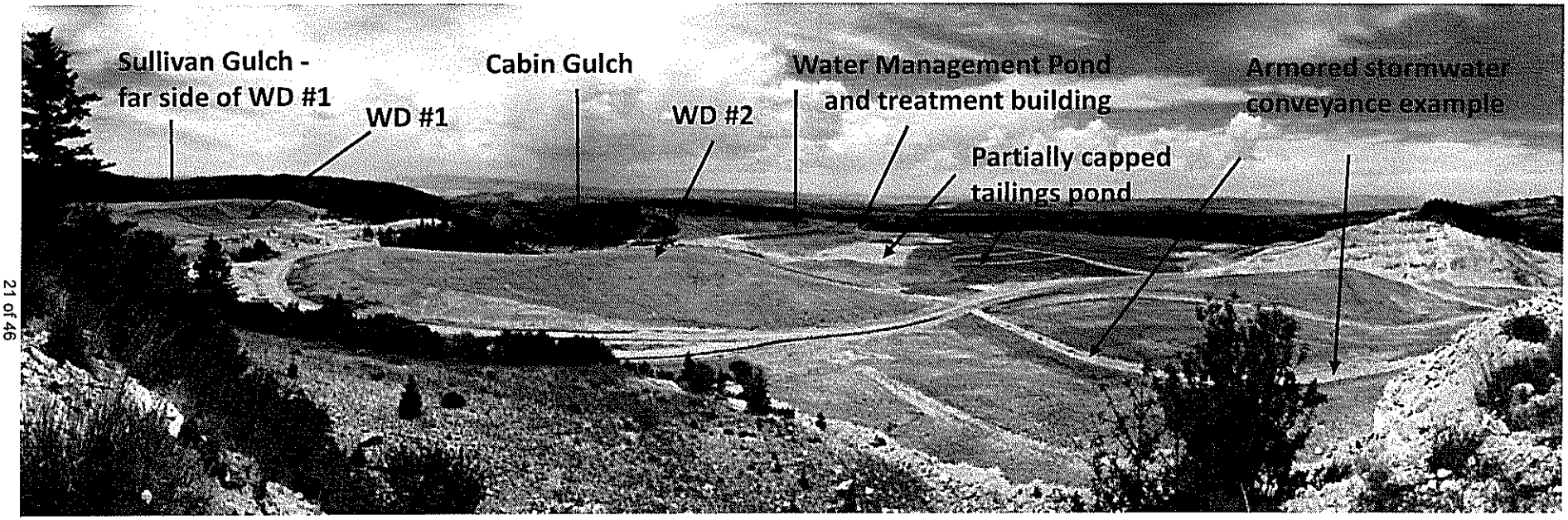


Photo No. 3 – Kinross – DeLamar Mine Overview
Facing south from viewpoint/overlook

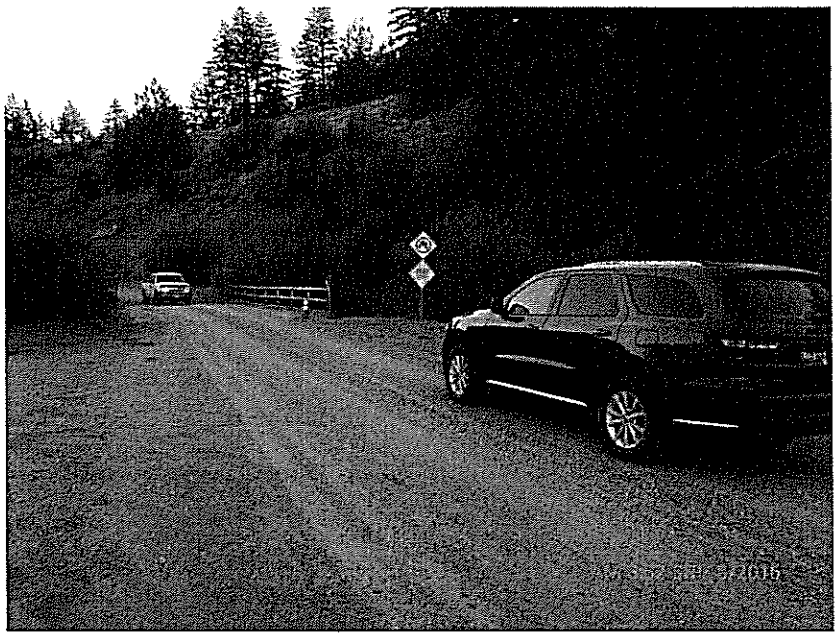


Photo No. 7 (P1020372)
Facing east – there is a fork in the road just before the access road to the DeLamar mine; the left fork parallels Jordan Creek as it continues on to historic Silver City. The right fork (pictured here) crosses the creek and leads directly to the mine.

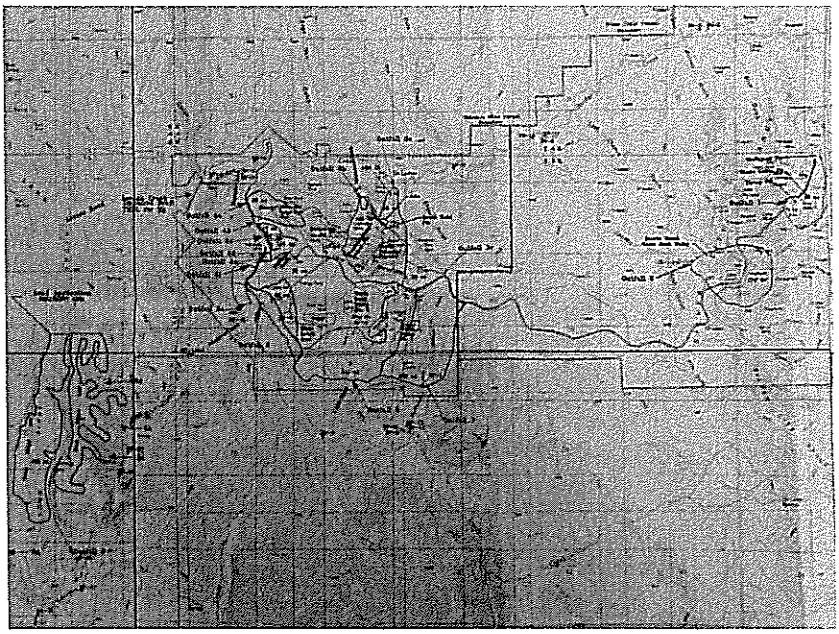


Photo No. 8 (P1000574 - cropped)
This map, borrowed from the 2014 inspection, identifies the location of the outfalls around the DeLamar site.

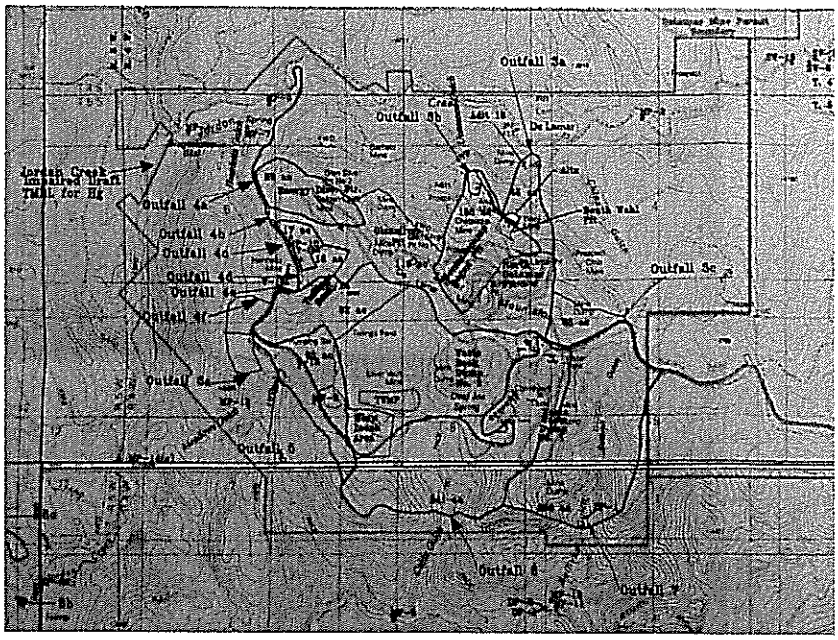


Photo No. 9 (P1000574 - cropped)
This map photo, borrowed and cropped from the 2014 inspection, identifies the location of the outfalls associated with the central portion of the mine site.

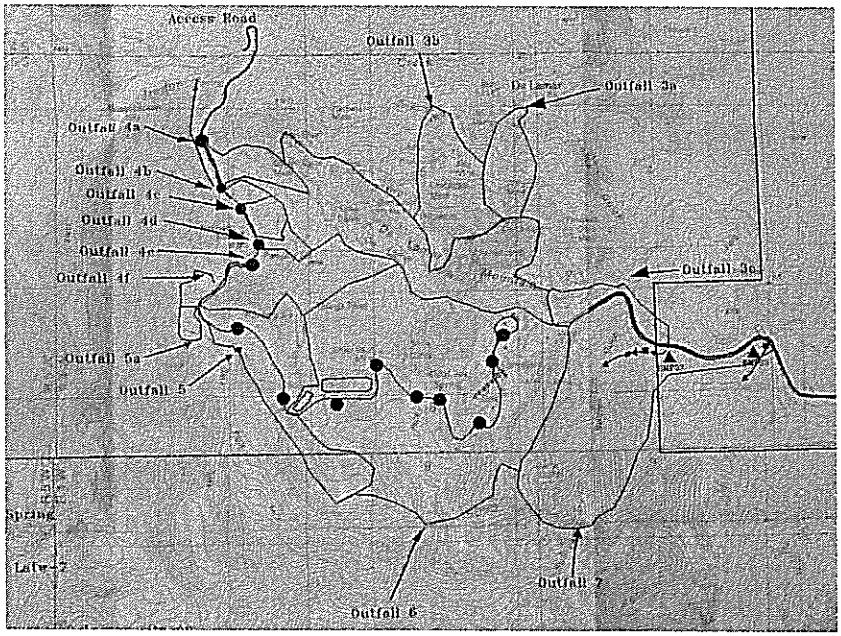
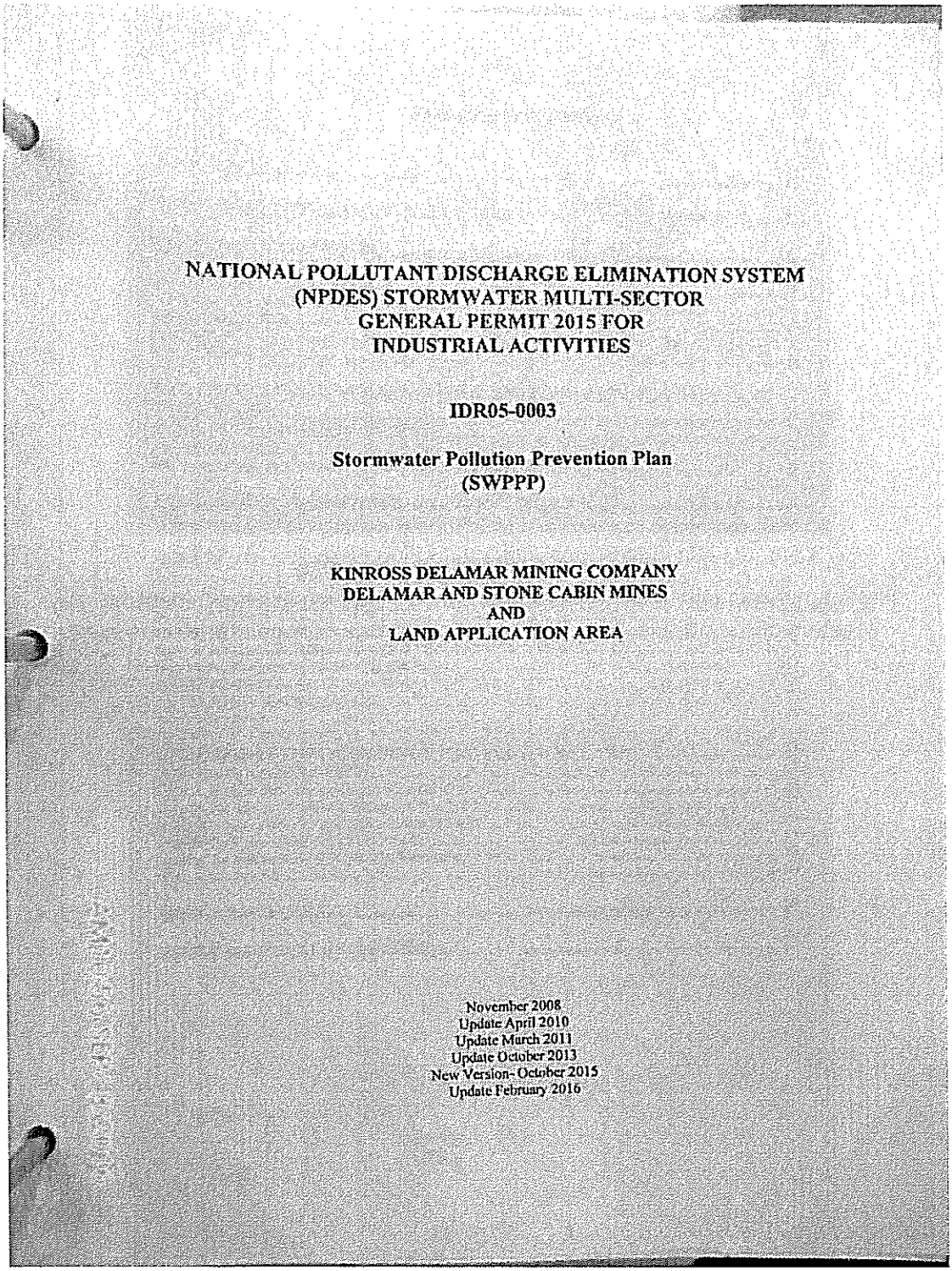


Photo No. 10 (P1020392 - cropped)
This map of the outfalls in the central portion of the mine is cropped from a map available at the time of the September 8, 2016 inspection.



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) STORMWATER MULTI-SECTOR
GENERAL PERMIT 2015 FOR
INDUSTRIAL ACTIVITIES

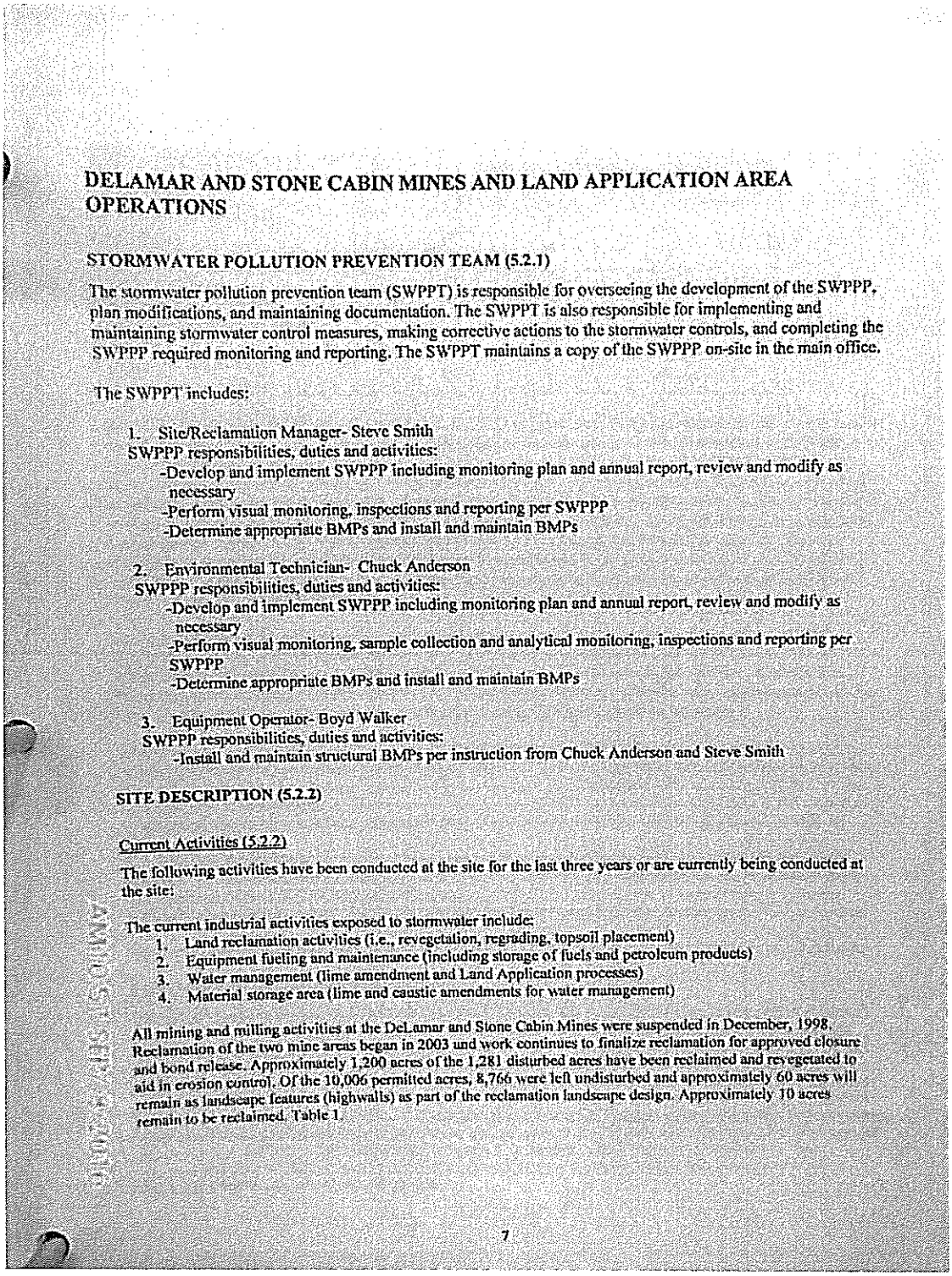
IDR05-0003

Stormwater Pollution Prevention Plan
(SWPPP)

KINROSS DELAMAR MINING COMPANY
DELAMAR AND STONE CABIN MINES
AND
LAND APPLICATION AREA

November 2008
Update April 2010
Update March 2011
Update October 2013
New Version- October 2015
Update February 2016

Photo No. 11 (P1020375)
The cover page of the SWPPP notes that a new version was created in October 2015; two months before submittal of the new Notice of Intent (as required).



DELAMAR AND STONE CABIN MINES AND LAND APPLICATION AREA OPERATIONS

STORMWATER POLLUTION PREVENTION TEAM (5.2.1)

The stormwater pollution prevention team (SWPPT) is responsible for overseeing the development of the SWPPP, plan modifications, and maintaining documentation. The SWPPT is also responsible for implementing and maintaining stormwater control measures, making corrective actions to the stormwater controls, and completing the SWPPP required monitoring and reporting. The SWPPT maintains a copy of the SWPPP on-site in the main office.

The SWPPT includes:

1. Site/Reclamation Manager- Steve Smith
SWPPP responsibilities, duties and activities:
-Develop and implement SWPPP including monitoring plan and annual report, review and modify as necessary
-Perform visual monitoring, inspections and reporting per SWPPP
-Determine appropriate BMPs and install and maintain BMPs

2. Environmental Technician- Chuck Anderson
SWPPP responsibilities, duties and activities:
-Develop and implement SWPPP including monitoring plan and annual report, review and modify as necessary
-Perform visual monitoring, sample collection and analytical monitoring, inspections and reporting per SWPPP
-Determine appropriate BMPs and install and maintain BMPs

3. Equipment Operator- Boyd Walker
SWPPP responsibilities, duties and activities:
-Install and maintain structural BMPs per instruction from Chuck Anderson and Steve Smith

SITE DESCRIPTION (5.2.2)

Current Activities (5.2.2)

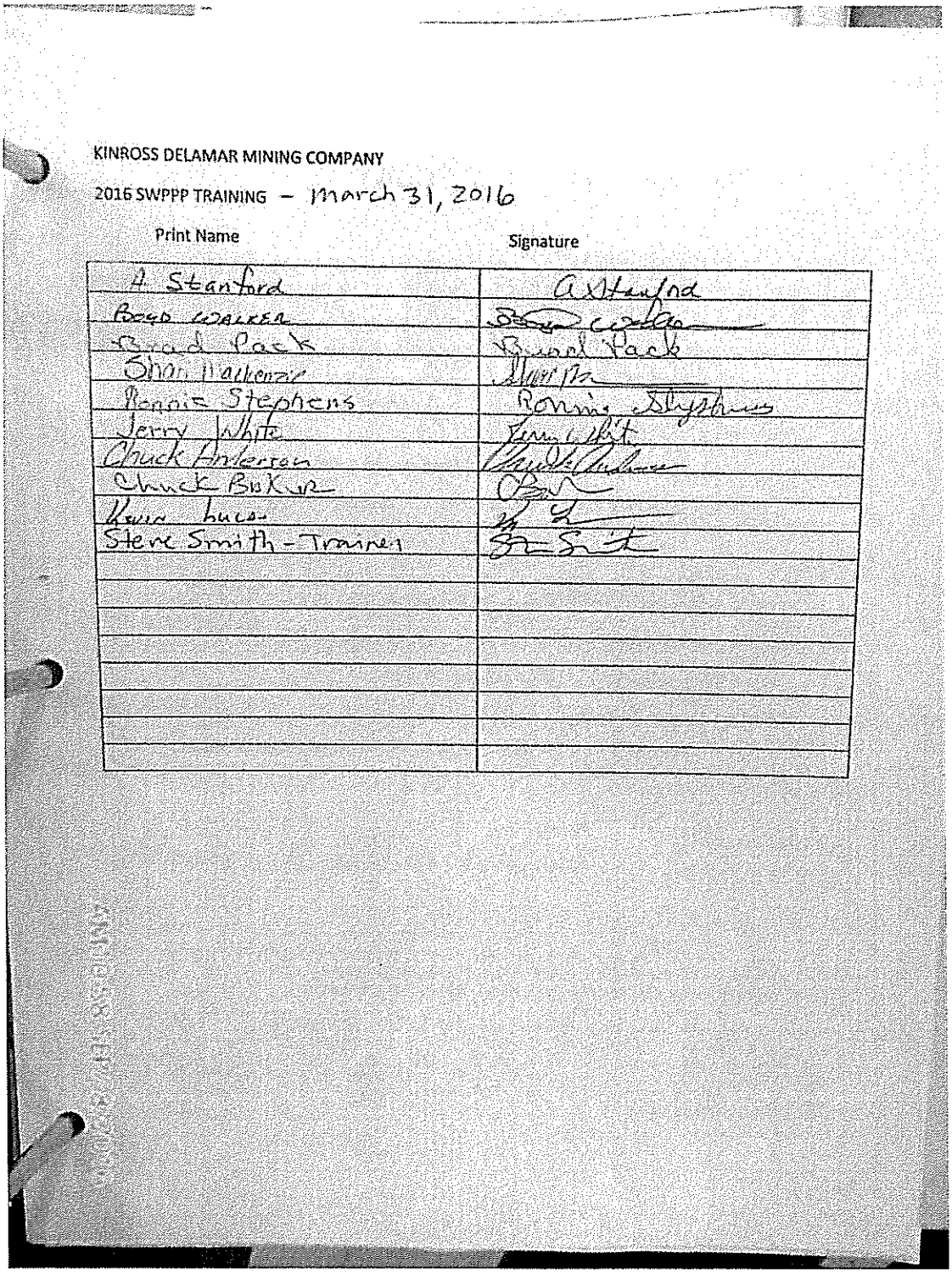
The following activities have been conducted at the site for the last three years or are currently being conducted at the site:

The current industrial activities exposed to stormwater include:
1. Land reclamation activities (i.e., revegetation, regrading, topsoil placement)
2. Equipment fueling and maintenance (including storage of fuels and petroleum products)
3. Water management (lime amendment and Land Application processes)
4. Material storage area (lime and caustic amendments for water management)

All mining and milling activities at the DeLamar and Stone Cabin Mines were suspended in December, 1998. Reclamation of the two mine areas began in 2003 and work continues to finalize reclamation for approved closure and bond release. Approximately 1,200 acres of the 1,281 disturbed acres have been reclaimed and revegetated to aid in erosion control. Of the 10,006 permitted acres, 8,766 were left undisturbed and approximately 60 acres will remain as landscape features (highwalls) as part of the reclamation landscape design. Approximately 10 acres remain to be reclaimed. Table 1

7

Photo No. 12 (P1020378)
The SWPPP clearly identifies the current members of the stormwater team.

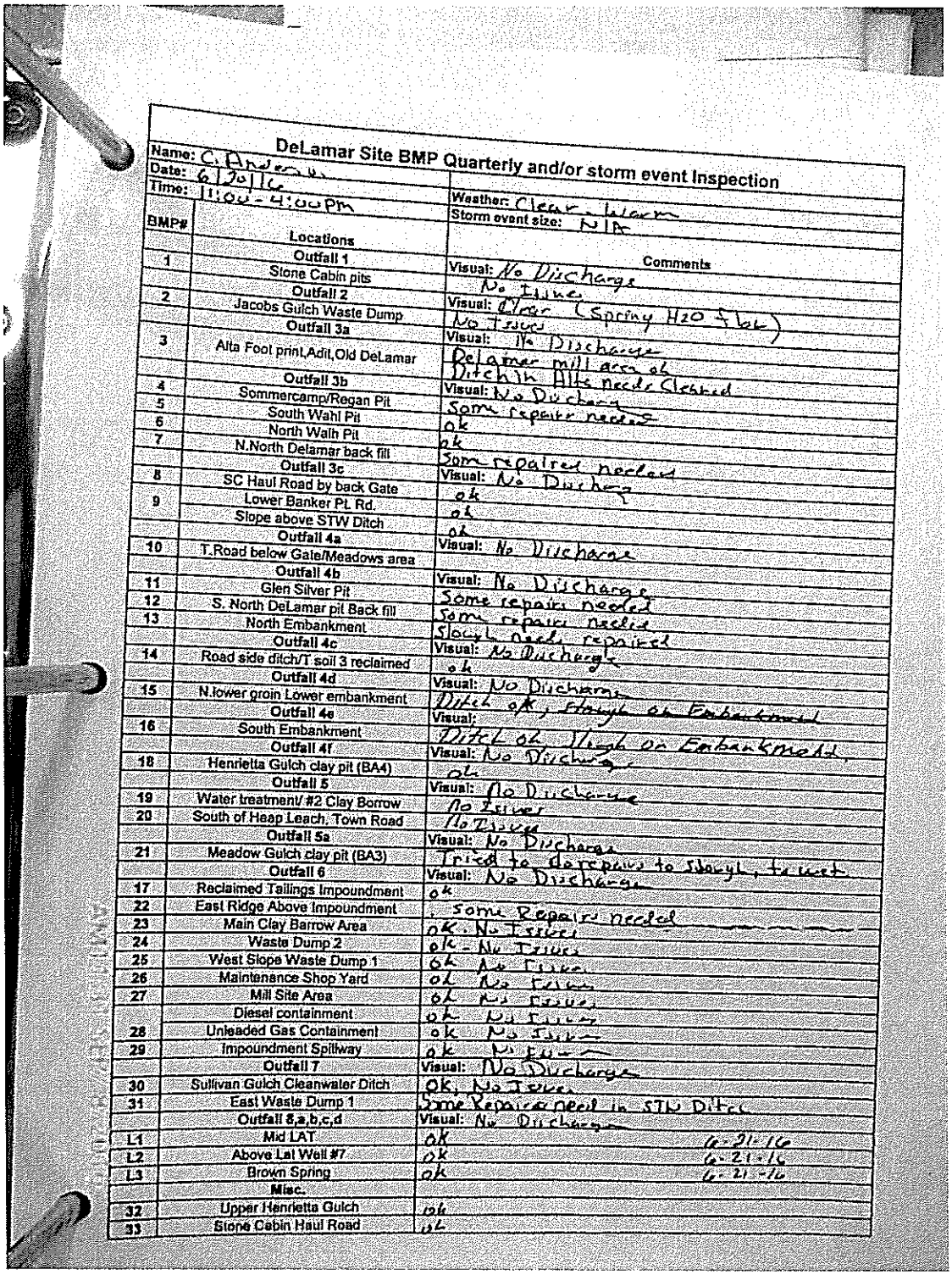


KINROSS DELAMAR MINING COMPANY

2016 SWPPP TRAINING – March 31, 2016

Print Name	Signature
A. Stanford	A Stanford
Brad Walker	
Brad Pack	Brad Pack
Shan Mackenzie	
Ronnie Stephens	Ronnie Stephens
Jerry White	
Chuck Anderson	
Chuck Baker	
Kevin Lucas	
Steve Smith - Trainer	

Photo No. 13 (P1020379)
The attendance list for the March 31, 2016 stormwater training included the construction crew working for the site constractor.

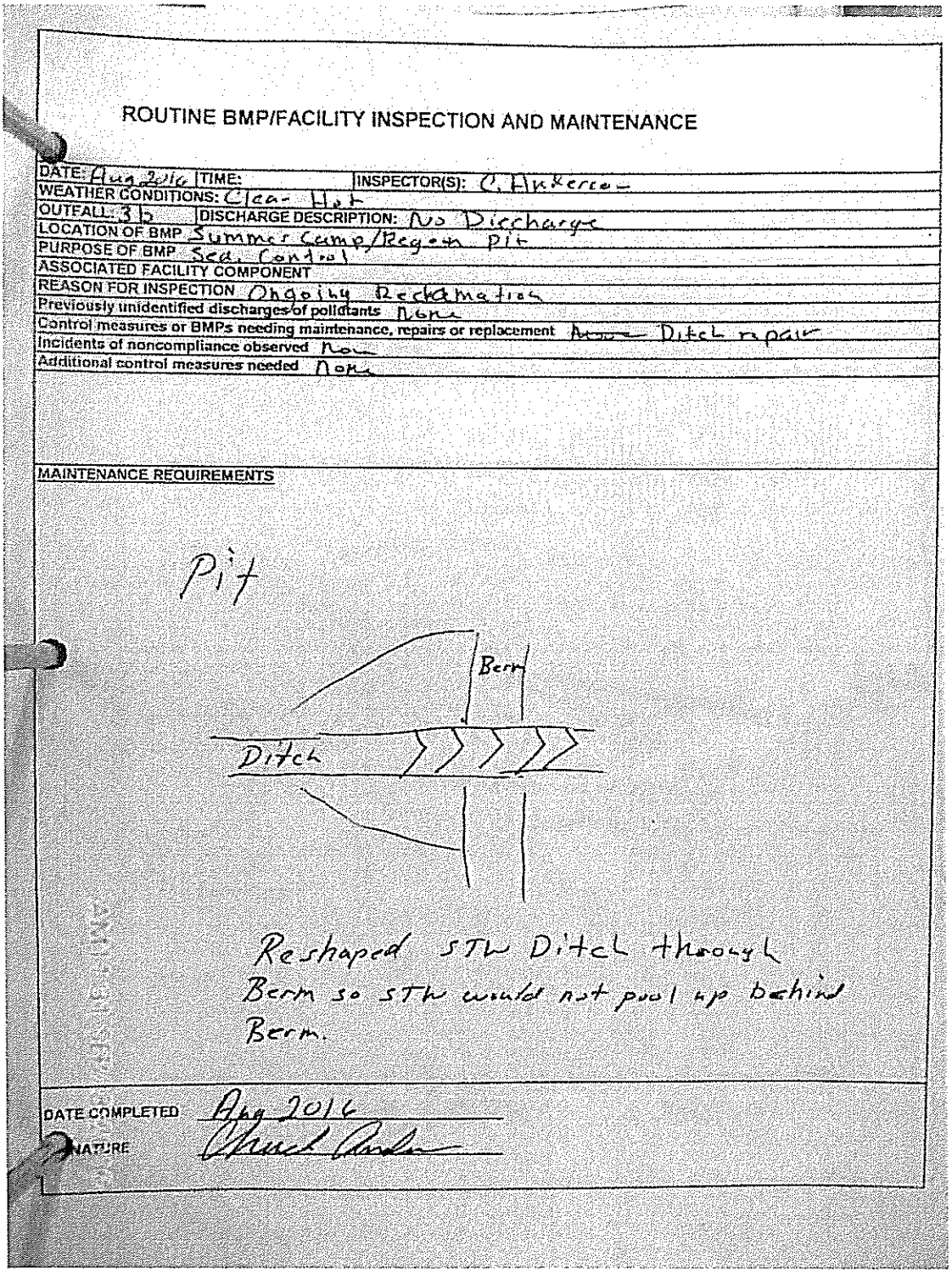


DeLamar Site BMP Quarterly and/or storm event Inspection

Name: C. Anderson
Date: 6/20/16
Time: 11:00 - 4:00pm
Weather: Clear - Warm
Storm event size: N/A

BMP#	Locations	Comments
	Outfall 1	Visual: No Discharge
1	Stone Cabin pits	No Issues
	Outfall 2	Visual: Clear (Spring H2O flow)
2	Jacobs Gulch Waste Dump	No Issues
	Outfall 3a	Visual: No Discharge
3	Alta Pool prim,Adit,Old DeLamar	Delamar mill area ok
		Ditch in Alta needs cleaned
	Outfall 3b	Visual: No Discharge
4	Sommercamp/Regan Pit	Some repair needed
5	South Wahl Pit	ok
6	North Walh Pit	ok
7	N.North Delamar back fill	Some repairs needed
	Outfall 3c	Visual: No Discharge
8	SC Haul Road by back Gate	ok
9	Lower Banker PL Rd.	ok
	Slope above STW Ditch	ok
	Outfall 4a	Visual: No Discharge
10	T.Road below Gate/Meadows area	
	Outfall 4b	Visual: No Discharge
11	Glen Silver Pit	Some repairs needed
12	S. North DeLamar pit Back fill	Some repairs needed
13	North Embankment	Slope need repaired
	Outfall 4c	Visual: No Discharge
14	Road side ditch/T soil 3 reclaimed	ok
	Outfall 4d	Visual: No Discharge
15	N.lower groin Lower embankment	Ditch ok, Slough on Embankment
	Outfall 4e	Visual:
16	South Embankment	Ditch ok, Slough on Embankment
	Outfall 4f	Visual: No Discharge
18	Henrietta Gulch clay pit (BA4)	ok
	Outfall 5	Visual: No Discharge
19	Water treatment/ #2 Clay Borrow	No Issues
20	South of Heap Leach, Town Road	No Issues
	Outfall 5a	Visual: No Discharge
21	Meadow Gulch clay pit (BA3)	Tried to do repairs to slough, to wet
	Outfall 6	Visual: No Discharge
17	Reclaimed Tailings Impoundment	ok
22	East Ridge Above Impoundment	some Repairs needed
23	Main Clay Barrow Area	ok. No Issues
24	Waste Dump 2	ok - No Issues
25	West Slope Waste Dump 1	ok No Issues
26	Maintenance Shop Yard	ok No Issues
27	Mill Site Area	ok No Issues
	Diesel containment	ok No Issues
28	Unleaded Gas Containment	ok No Issues
29	Impoundment Spillway	ok No Issues
	Outfall 7	Visual: No Discharge
30	Sullivan Gulch Cleanwater Ditch	Ok, No Issues
31	East Waste Dump 1	Some Repairs need in STW Ditch
	Outfall 8,a,b,c,d	Visual: No Discharge
L1	Mid LAT	ok 6-21-16
L2	Above Lal Well #7	ok 6-21-16
L3	Brown Spring	ok 6-21-16
	Misc.	
32	Upper Henrietta Gulch	ok
33	Stone Cabin Haul Road	ok

Photo No. 14 (P1020380)
Detailed inspections take in all the outfalls at the site.



ROUTINE BMP/FACILITY INSPECTION AND MAINTENANCE

DATE: Aug 2016 | TIME: | INSPECTOR(S): C. Hukreede

WEATHER CONDITIONS: Clear Hot

OUTFALL: 35 | DISCHARGE DESCRIPTION: No Discharge

LOCATION OF BMP: Summer Camp/Regeon pit

PURPOSE OF BMP: Sed. Control

ASSOCIATED FACILITY COMPONENT

REASON FOR INSPECTION: Ongoing Reclamation

Previously unidentified discharges of pollutants: None

Control measures or BMPs needing maintenance, repairs or replacement: None — Ditch repair

Incidents of noncompliance observed: None

Additional control measures needed: None

MAINTENANCE REQUIREMENTS

Pit

Reshaped STW Ditch through Berm so STW would not pool up behind Berm.

DATE COMPLETED: Aug 2016

SIGNATURE:

Photo No. 15 (P1020381)
Maintenance and repairs are noted in the SWPPP but only show the month (as opposed to the specific day) when the work was completed.

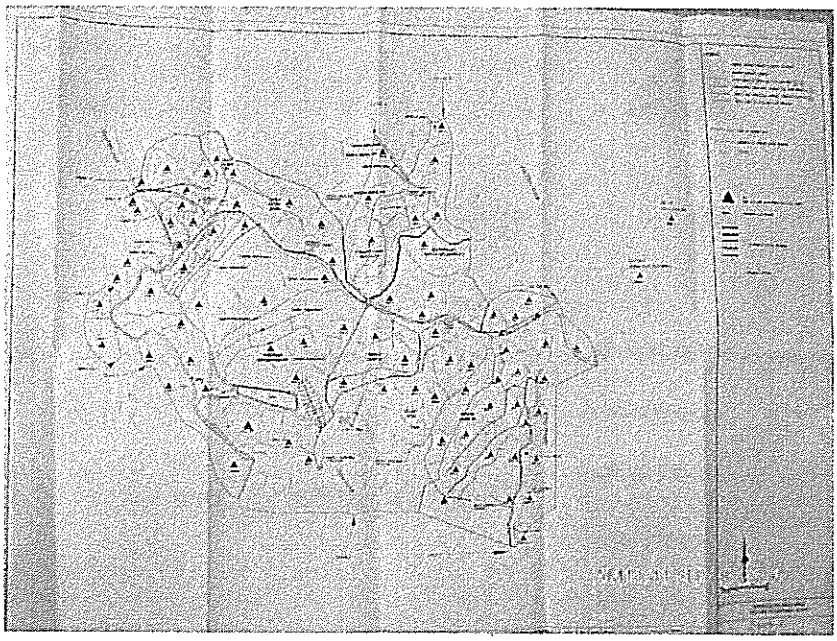


Photo No. 16 (P1020391)
This map provides general information about the BMPs installed at various locations around the site.

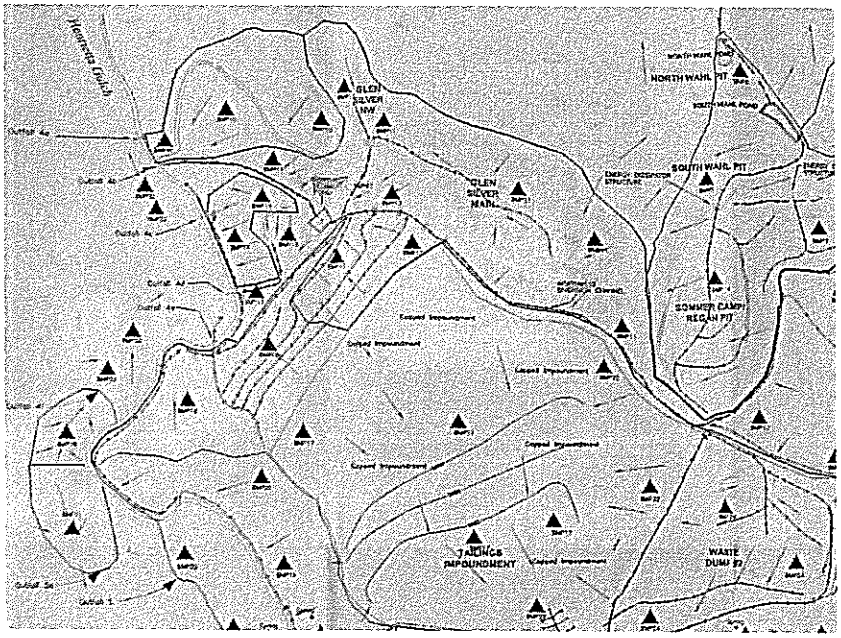


Photo No. 17 (P1020391 - cropped)
This is a closer view of the BMP map. It provides general information about the BMPs that have been installed in a general area. It does not provide the type of detail that would identify the specific location for each BMP.

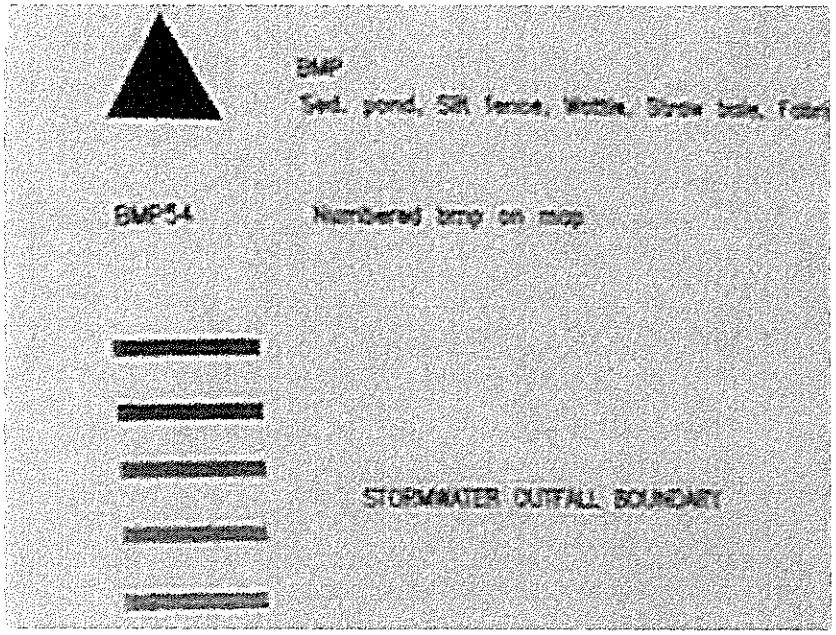


Photo No. 18 (P1020393 - Legend)
This is the map legend associated with the BMP map.

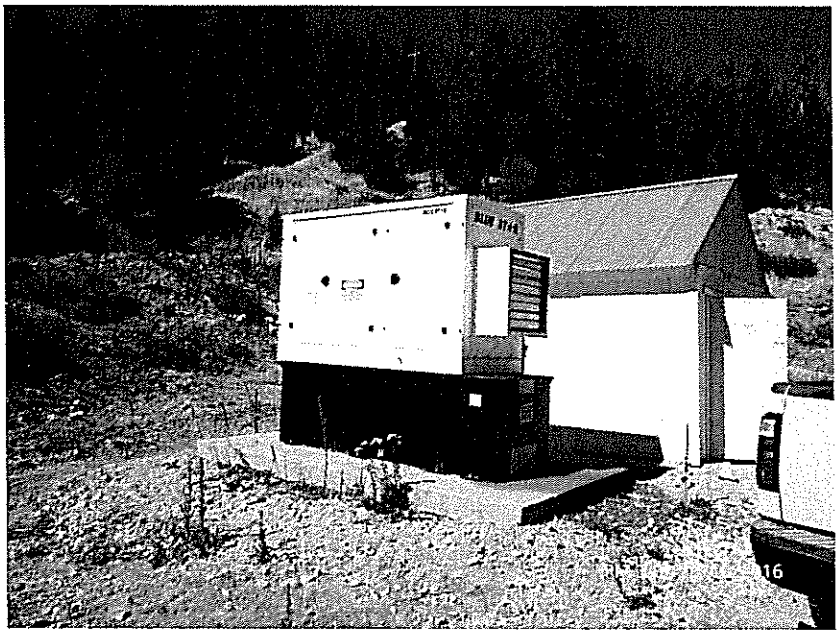


Photo No. 19 (P1020400)
Facing northwest – this is the pumphouse and the diesel-powered generator located midway down the Sullivan Gulch road. The pumps deliver wastewater from the WD-1 collectors to the WTB located on the opposite side of the mine site.

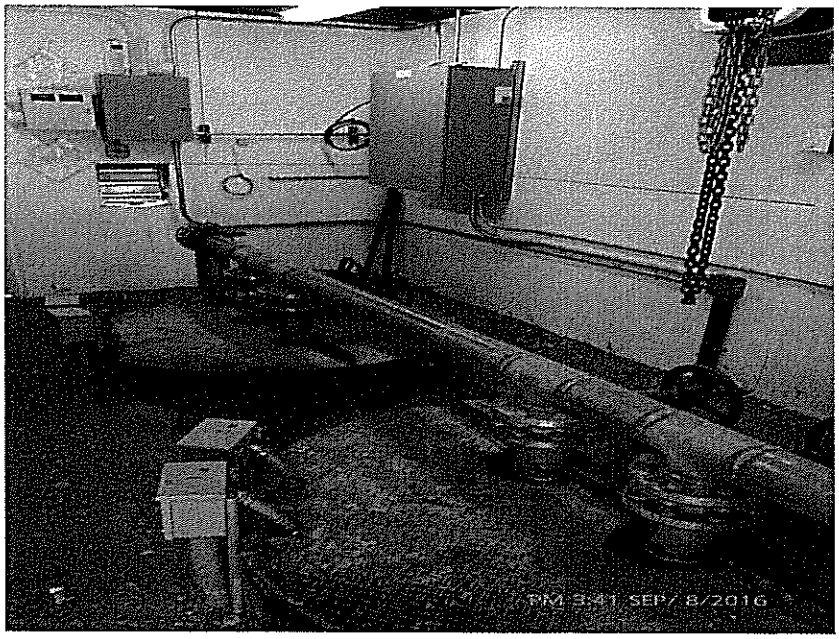


Photo No. 20 (P1020401)
These are the four pumps located within the Sullivan Gulch pumphouse. Typical flow into the well cans is reportedly 5-7 gpm. The maximum flow from WD-1 is reportedly 50 gpm.

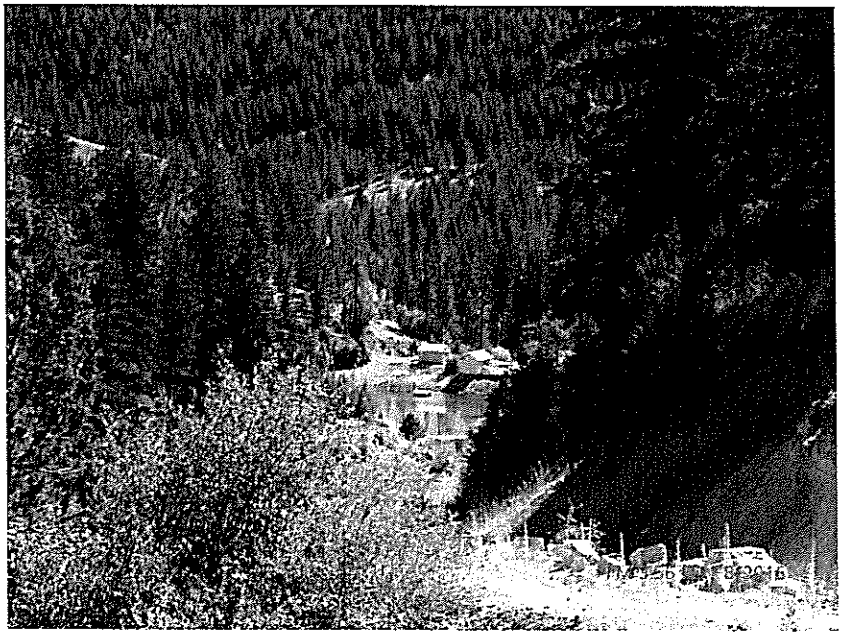


Photo No. 21 (P1020403)
Facing south – this photo, made from the Sullivan Gulch pumphouse parking area, provides a glimpse of the groundwater treatment system located at the end of the road.

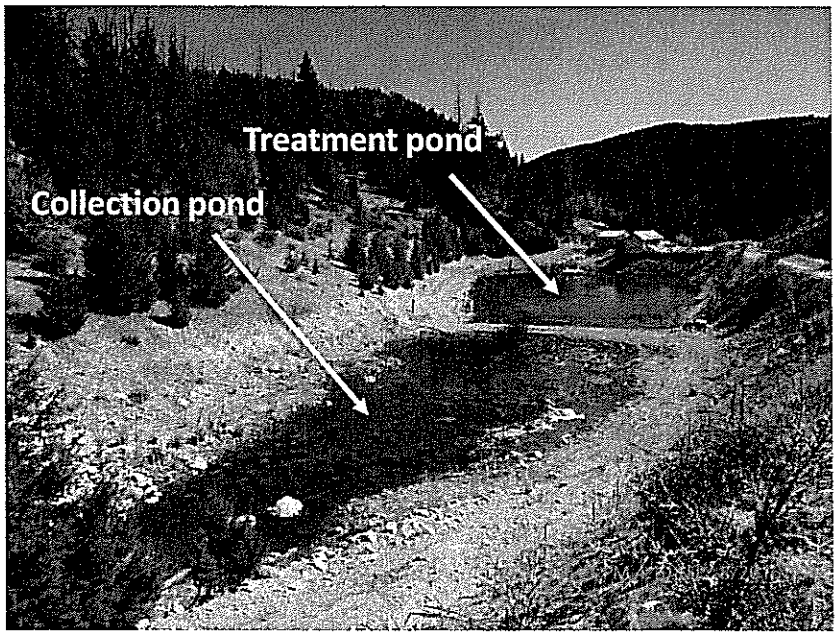


Photo No. 22 (P1020404)
Facing southeast – the first (clear) pond collects water from the spring. Water is pumped from this pond into and through the treatment building and back into the second (far) pond. From the second pond, the treated water is discharged to Louse Creek (temperature permitting) or to the Sullivan Gulch pumphouse.

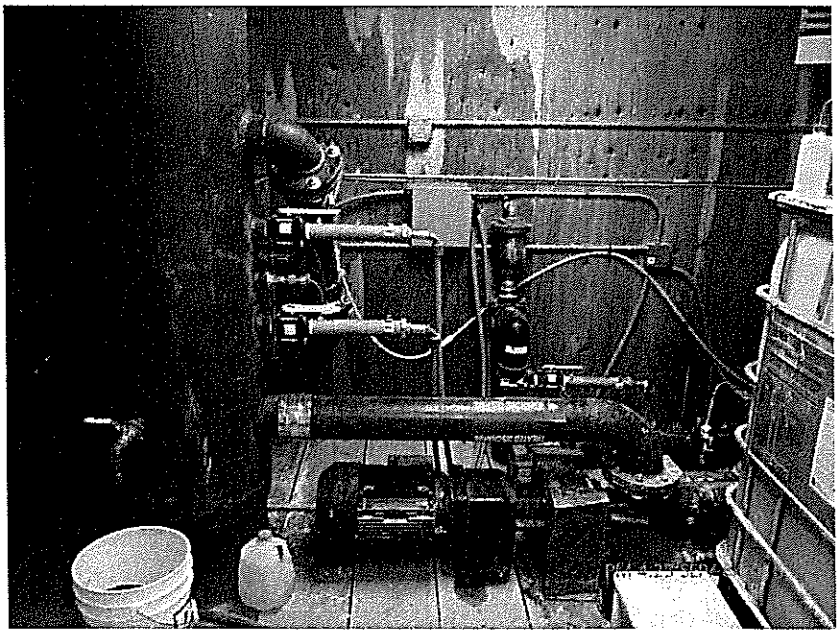


Photo No. 23 (P1020409)
Inside the groundwater treatment building, a sodium hydroxide solution is used to adjust the pH of the water from the first pond before discharging it back to the second pond.

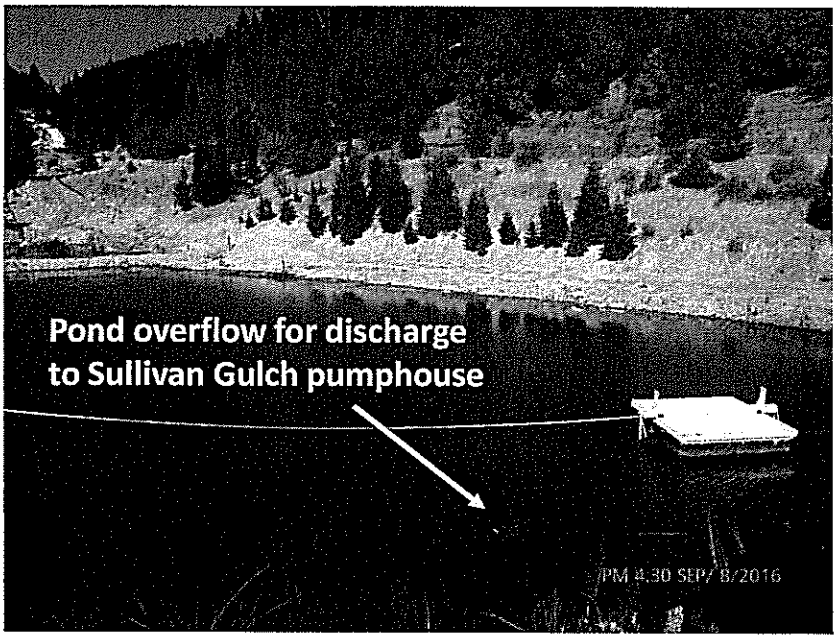


Photo No. 24 (P1020411)
Facing northeast – a pump suspended from this barge pumps the treated water (temperature permitting) from the second pond back through the treatment building where pH and temperature are both monitored in-line. As long as the effluent is within permit limits, it can be discharged to Louse Creek.

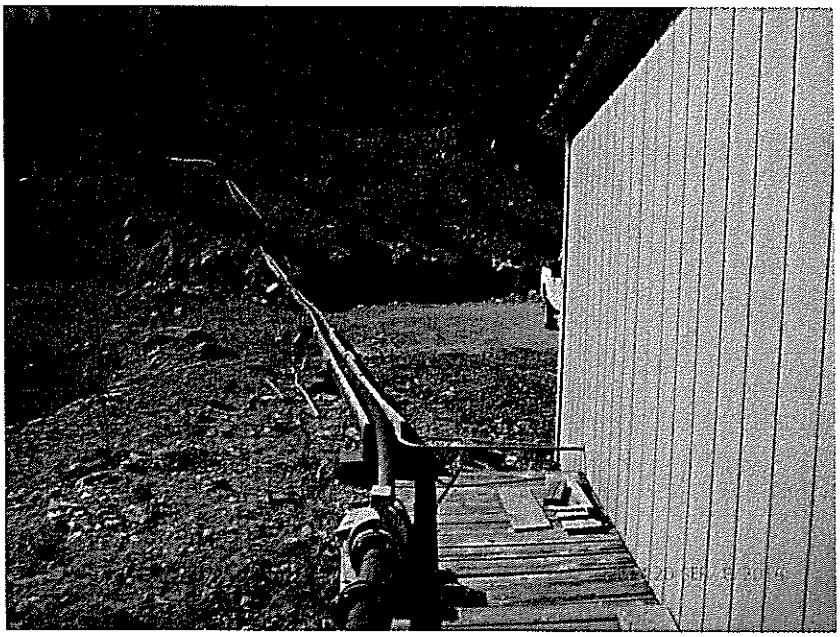


Photo No. 25 (P1020407)
Facing west – exiting the treatment building, the is the discharge line (with flow meter) to Louse Creek located at the base of Sullivan Gulch. .

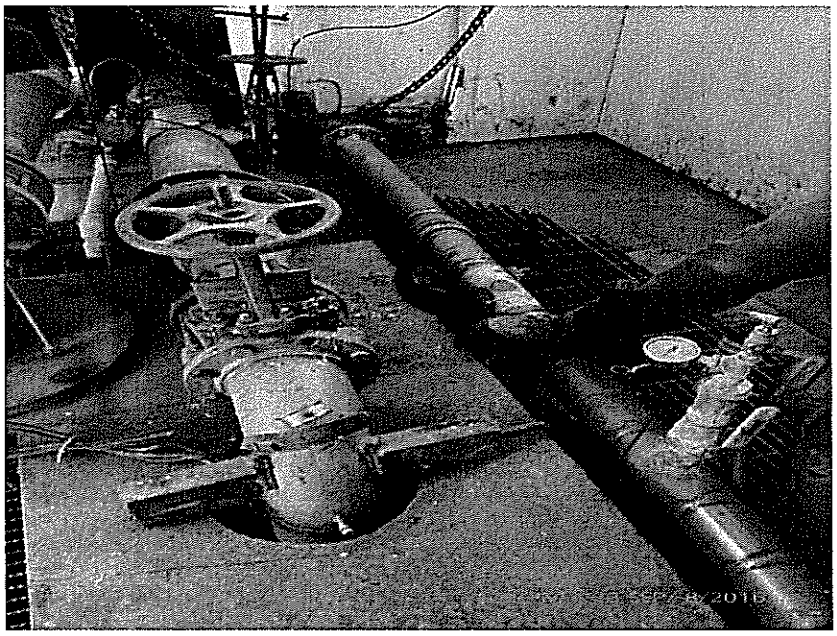


Photo No. 26(P1020410)
This pumphouse, located next to the groundwater treatment building, delivers treated groundwater to the Sullivan Gulch pumphouse when the water is too warm to discharge to Louse Creek.

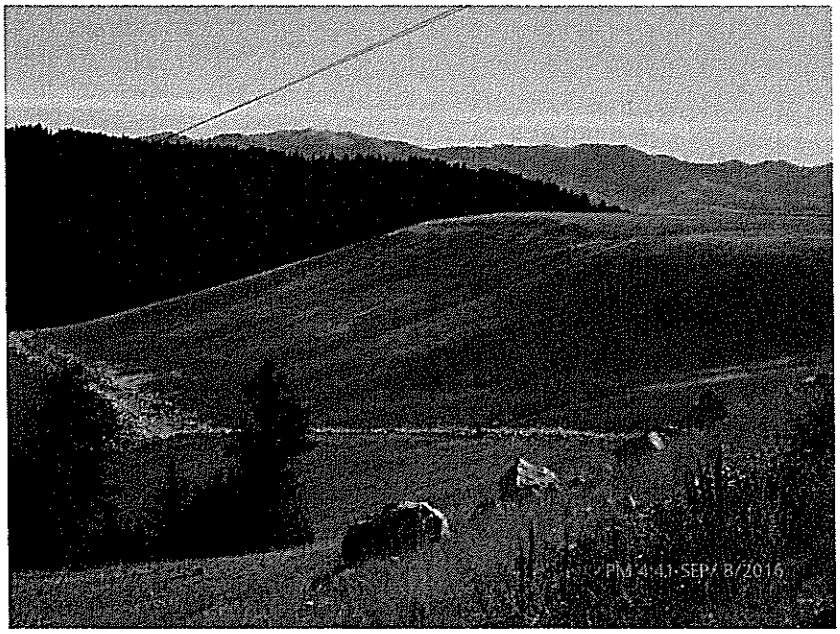


Photo No. 27 (P1020412)
Facing southwest – this is one of the armored trenches used to convey stormwater from the east side of WD-2 to Cabin Gulch

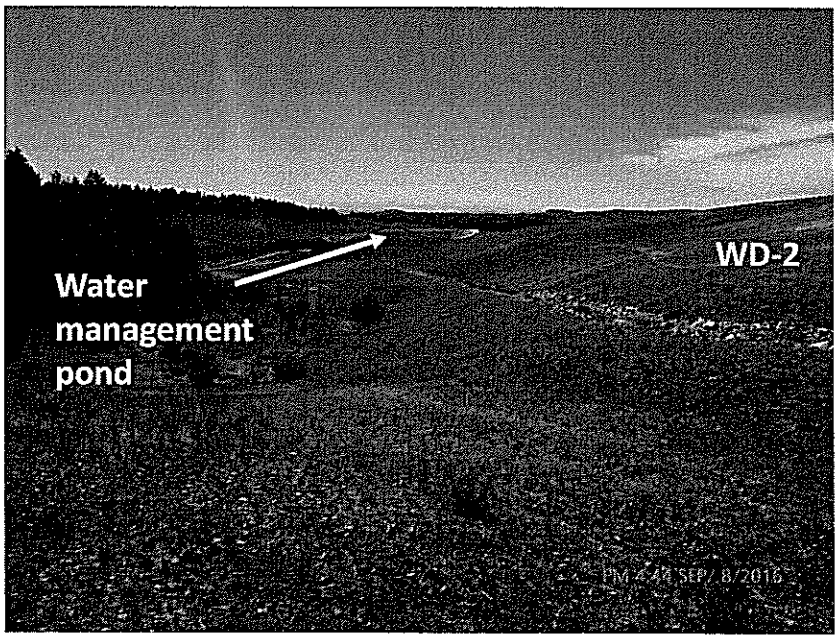


Photo No. 28 (P1020413)
Facing southwest – the 350 acre-feet (> 114 million gallons) water management pond is located on the far side of WD-2.

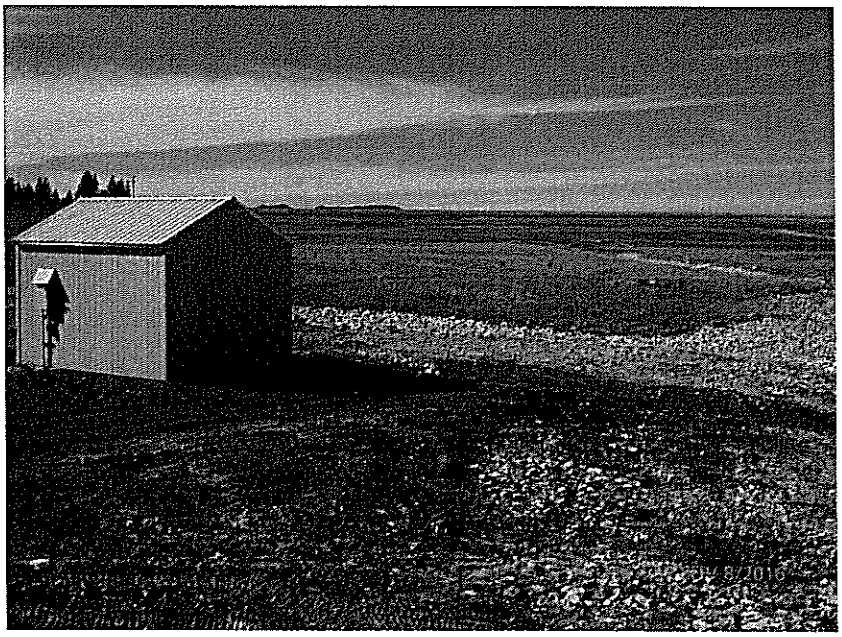


Photo No. 29 (P1020415)
Facing northwest – armored trenches come together in an area near the base of the west side of WD-2 and the tailings pond. From this area, stormwater is conveyed to the Cabin Gulch trench. The *Tails Collection Pump House* collects seepage from the tailings pond and delivers it to the WTB.

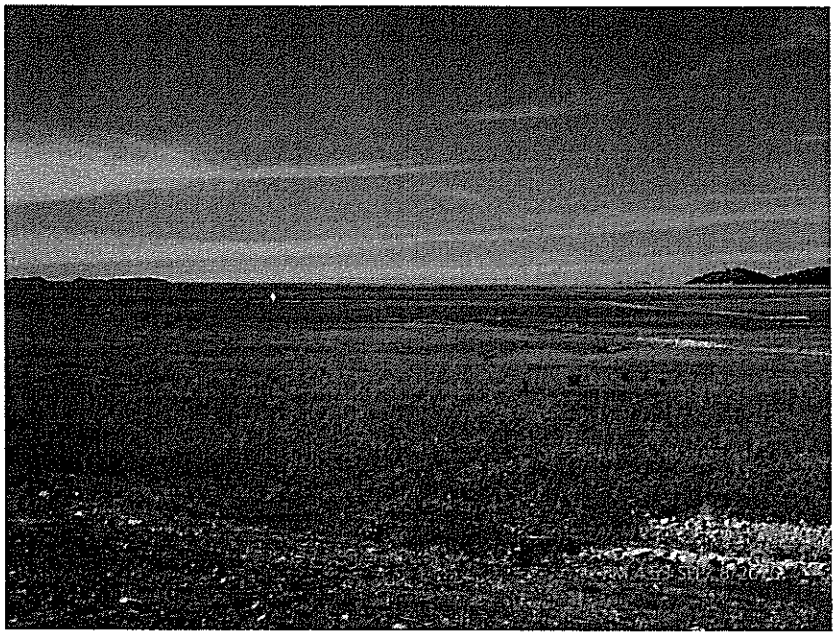


Photo No. 30 (P1020416)
Facing northwest – cattle graze on the vegetated surface of the capped tailings pond.

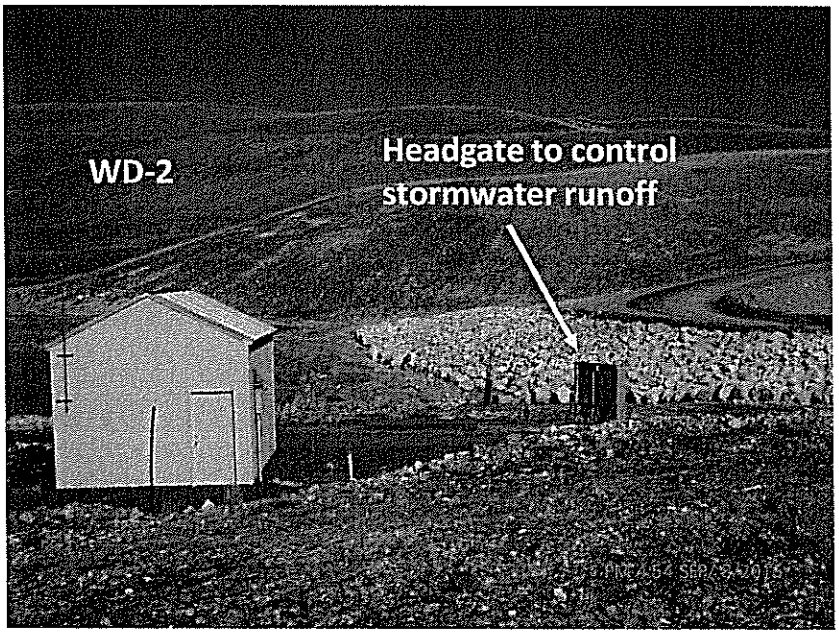


Photo No. 31 (P1020419)
Facing northeast – stormwater runoff from the west side of WD-2 and the capped tailings pond flows down to this headgate. The *Tails Collection Pump House* delivers seepage from the tailings pond to the WTB.

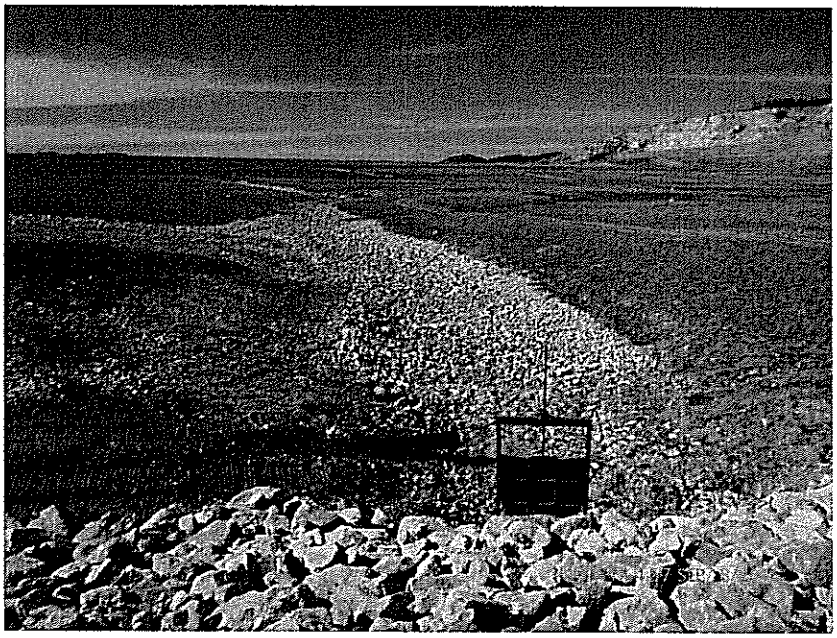


Photo No. 32 (P1020421)
Facing north – this headgate, installed on the upstream side of a culvert under the main road around the site, can backup stormwater runoff to prevent it from washing out the culvert at very high flow.

Photo No. 33 (P1020420)
Facing south – this is the downstream side of the culvert noted in the previous photo. The armored channel conveys stormwater down Cabin Gulch to Louse Creek.

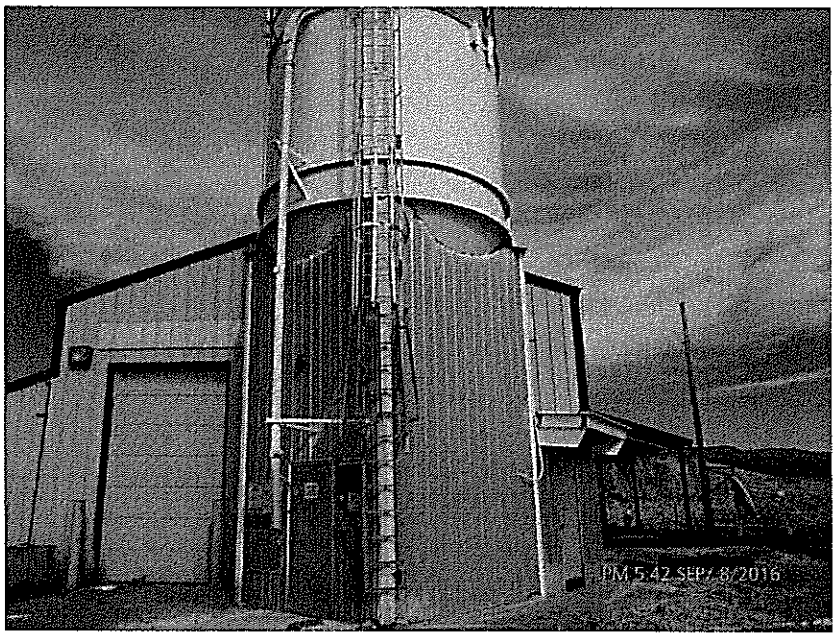


Photo No. 34 (P1020437)
Facing northeast – the wastewater treatment building (WTB), located near the SW corner of the former tailings pond, uses a lime slurry to adjust the pH of the mine seepage collected from various locations around the site.

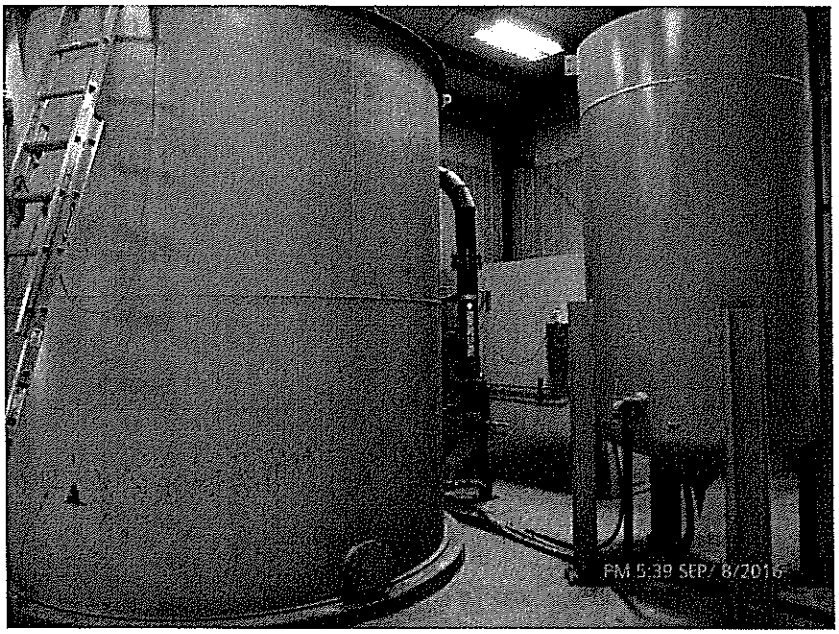


Photo No. 35 (P1020436)
The mine wastewater is treated in the larger tank. A similar tank is available if needed but has not been used in many years.

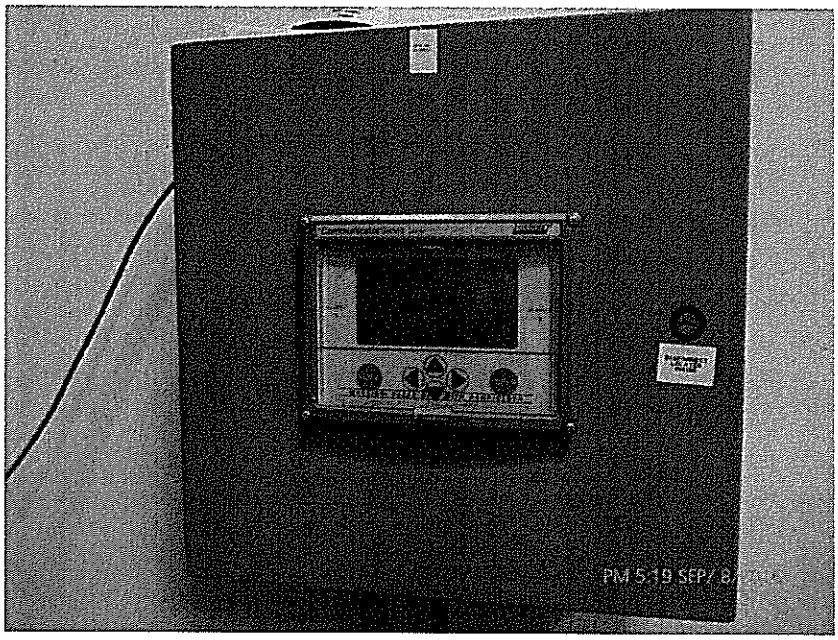


Photo No. 36 (P1020433)
The pH of the treated wastewater is continuously monitored prior to discharge to the adjacent settling pond.

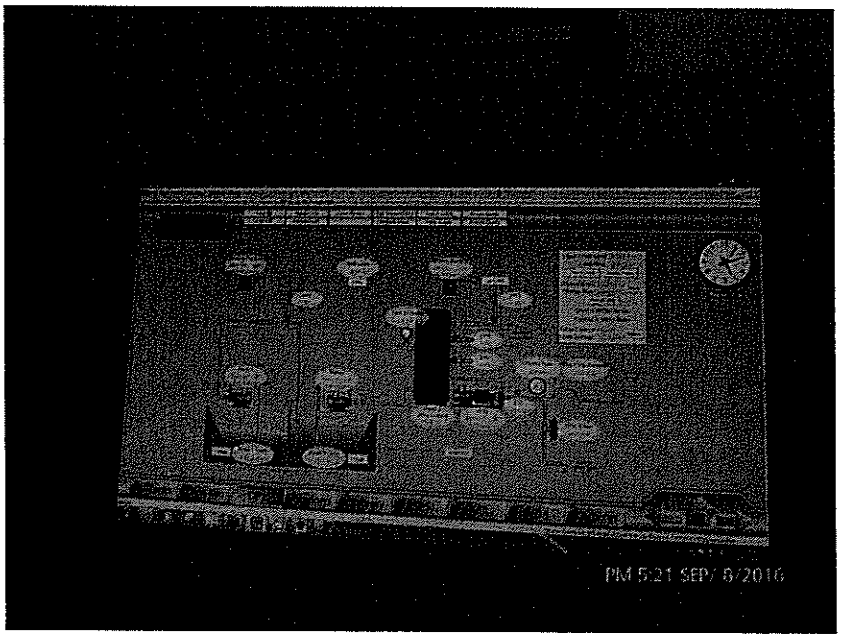


Photo No. 37 (P1020435)
The control center for the Supervisory Control and Data Acquisition (*SCADA)* system is located in the WTB. The system allows the operator to monitor water quality and operate valves, pumps and other systems at locations around the site.

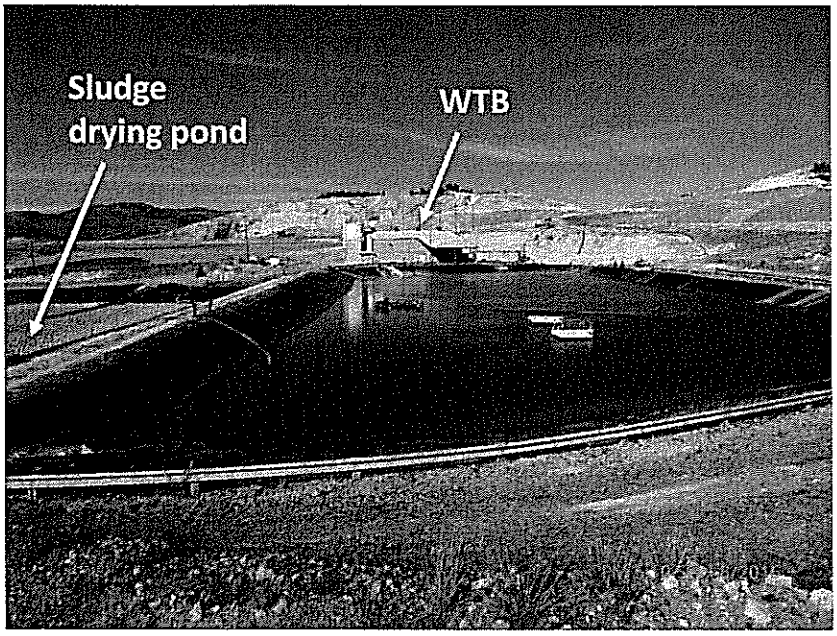


Photo No. 38 (P1020424)
Facing north – the treated wastewater from the WTB is discharged to this settling pond. Water is pumped from this pond to the WMP (located to the right of the settling pond – not visible in this photo). The sludge from the bottom of the pond is transferred to the new drying pond on the left.

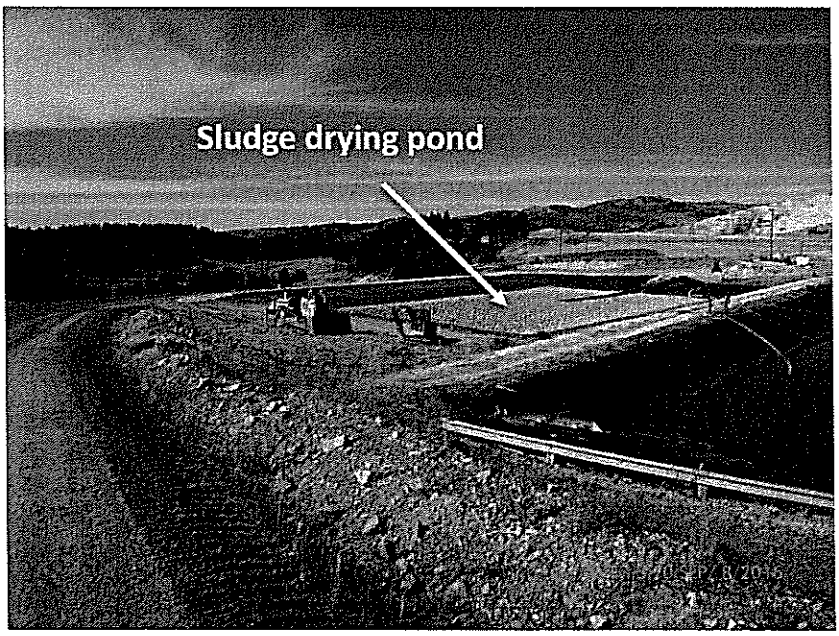


Photo No. 39 (P1020426)
Facing northwest – a new sludge drying pond was installed since the time of the July 29, 2014 inspection.

Photo No. 40 (P1020431)
Facing south – shortly before this inspection, composite samples of the sludge were collected for Toxicity Characteristic Leaching Procedure (TCLP) analysis. Sample results were not available at the time of this inspection.

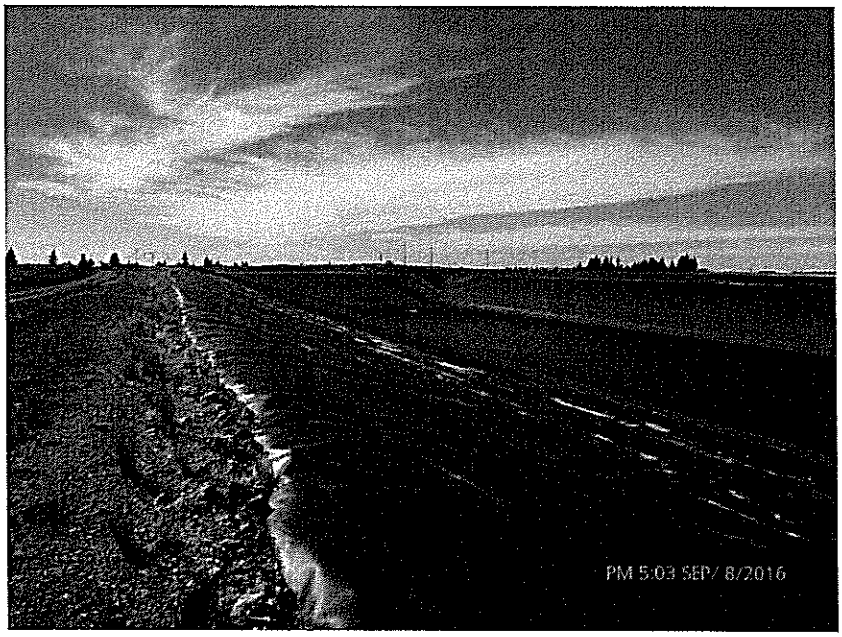


Photo No. 41 (P1020422)
Facing west – armored stormwater conveyance near sump collecting mine seepage from WD #1

Photo No. 42 (P1020423)
Facing west – armored stormwater conveyance on the east side of WD #1 near start of road down Sullivan Gulch.

Photos continued on next page

Kinross DeLamar Mine– Photo Log
MSGP & GWGP Compliance Evaluation Inspection; September 8, 2016

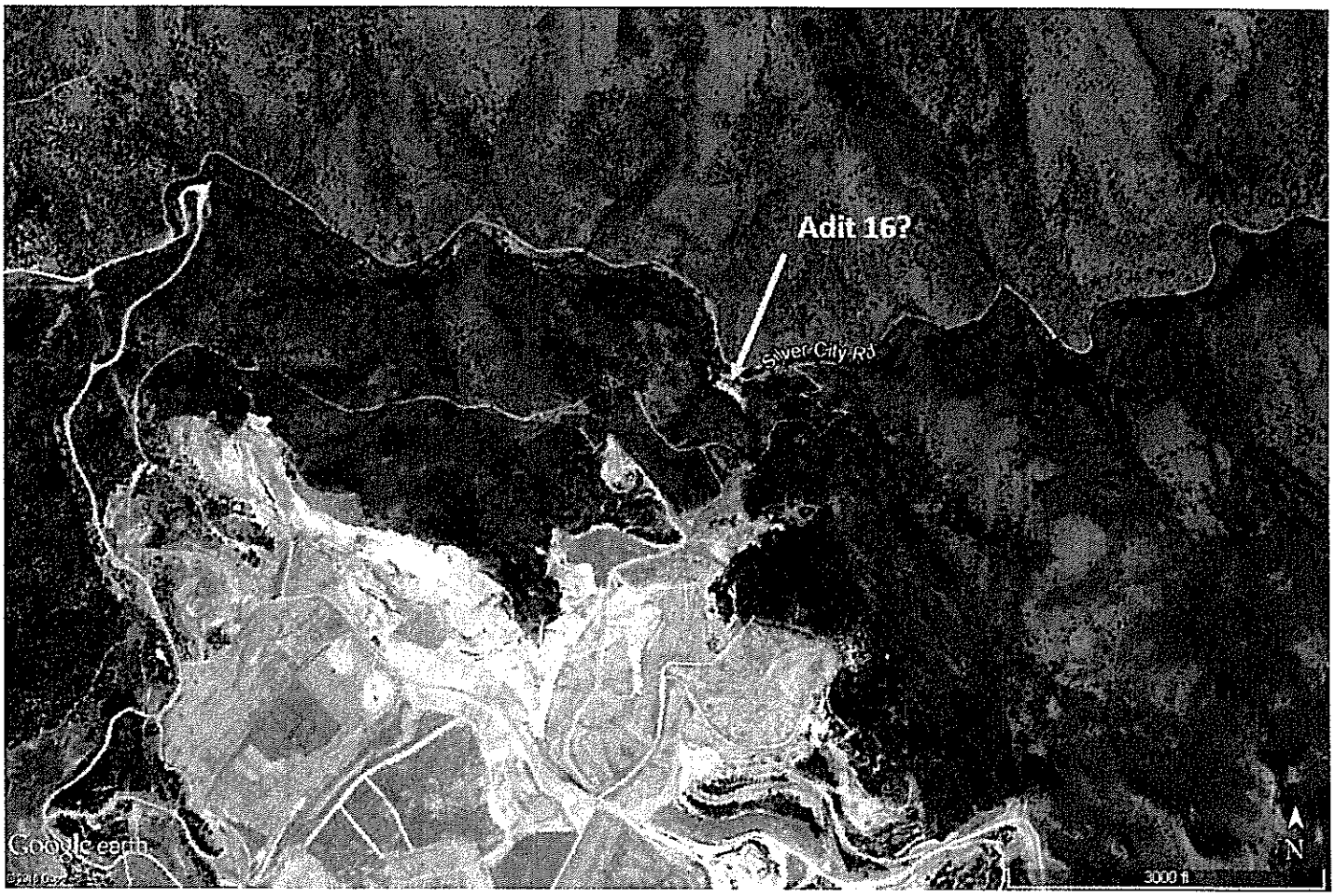


Photo No.43 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Adit 16 on the north side of the DeLamar Mine

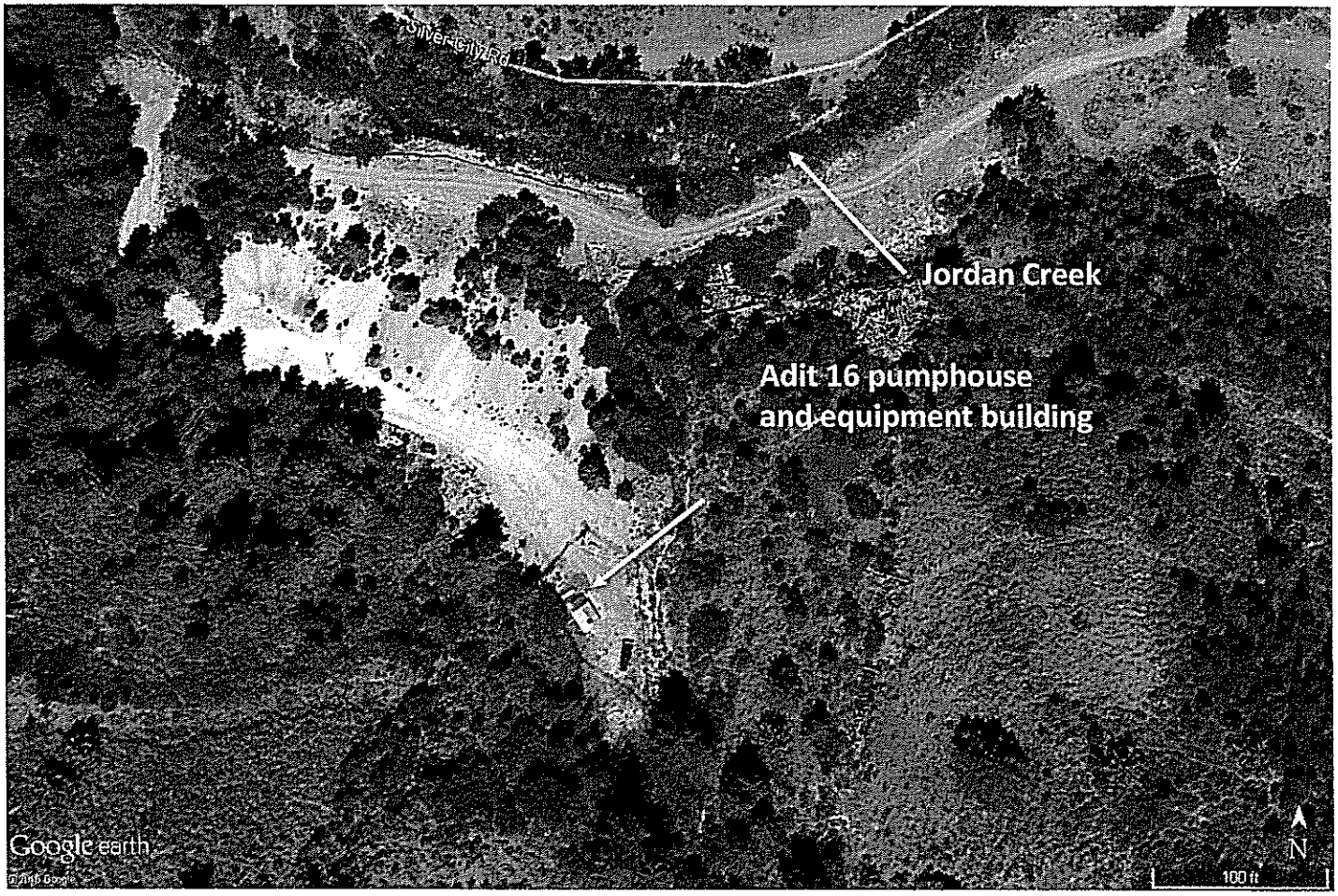


Photo No.44 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Adit 16 in relation to Jordan Creek

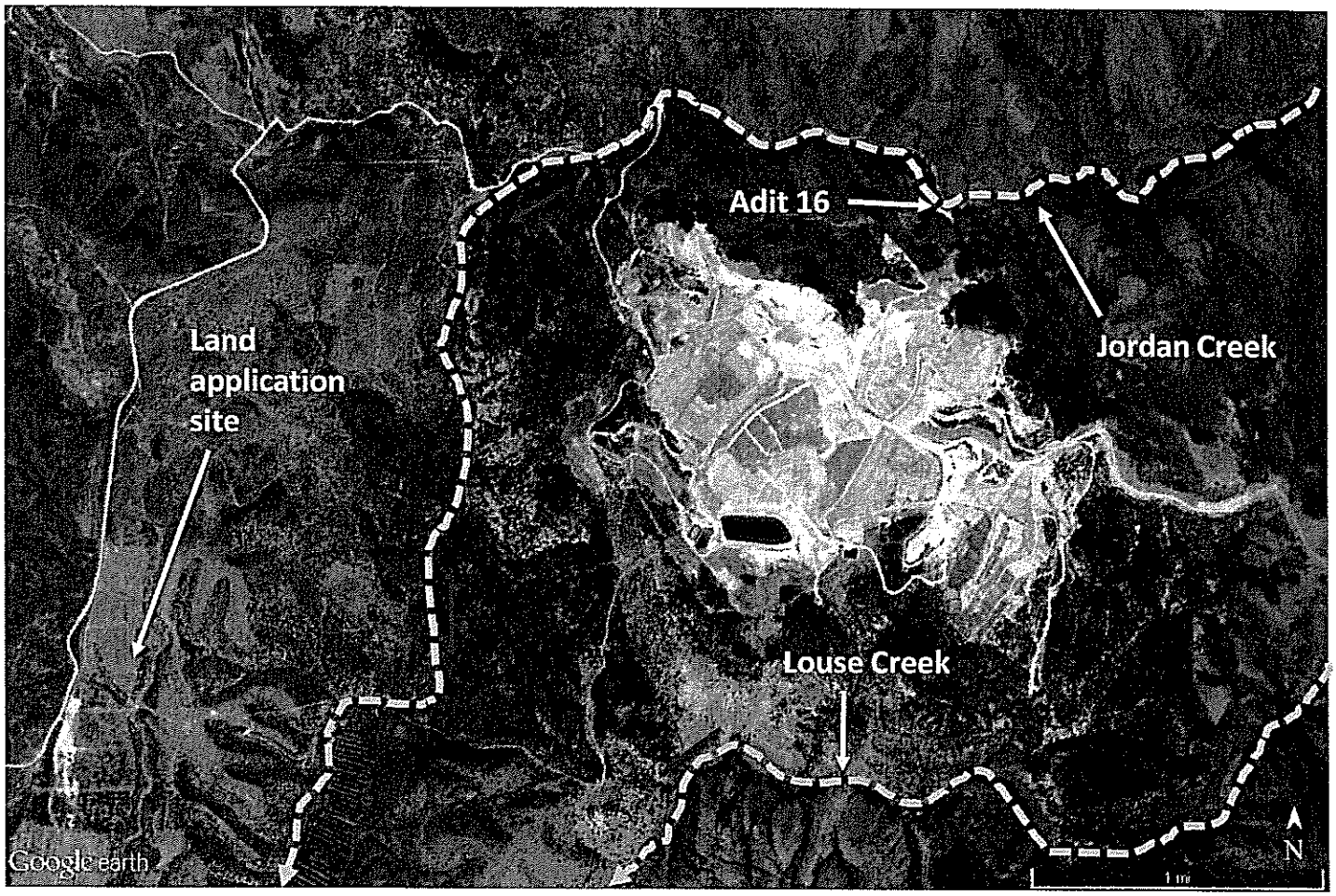


Photo No.45 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Land application site in relation to mine proper

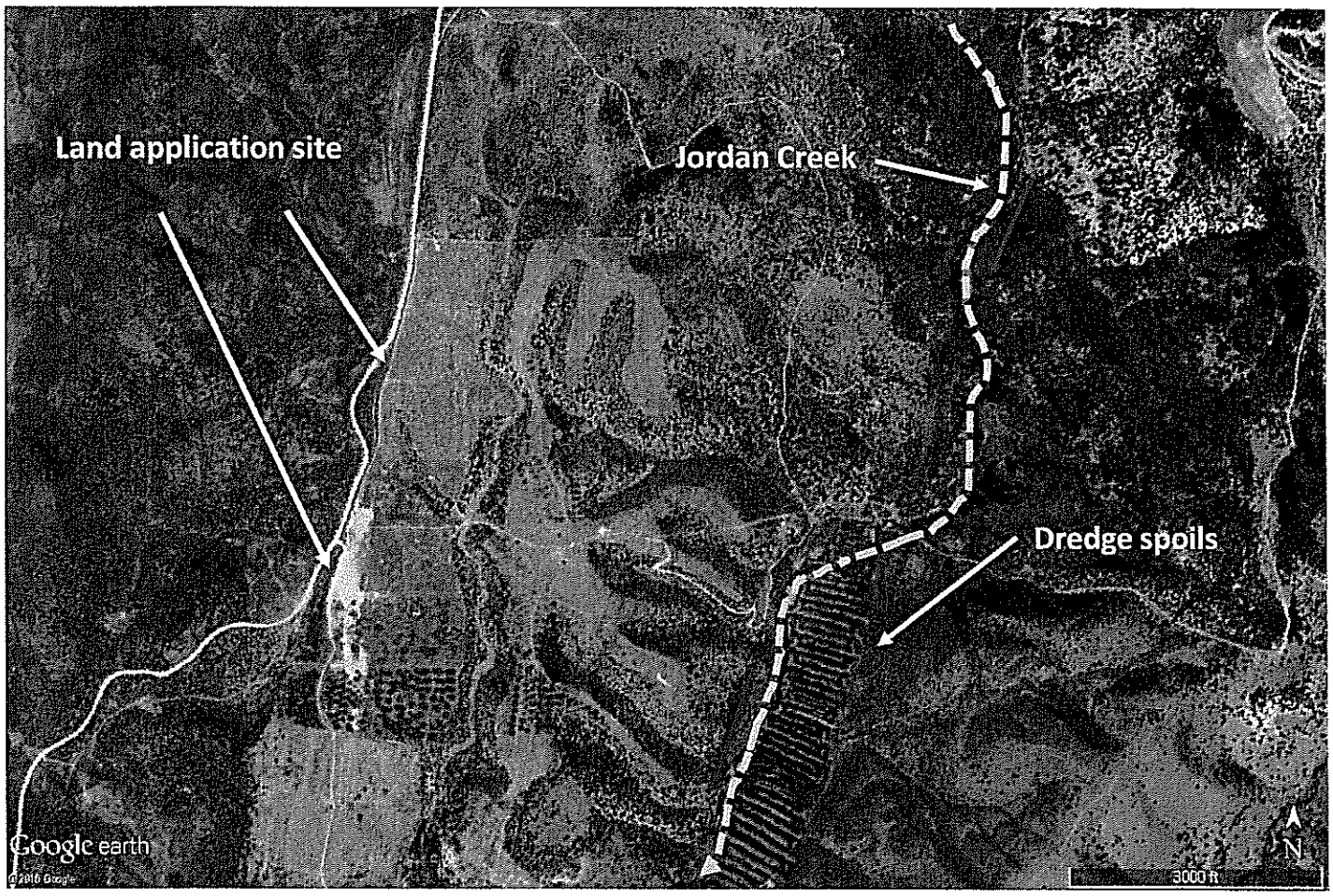


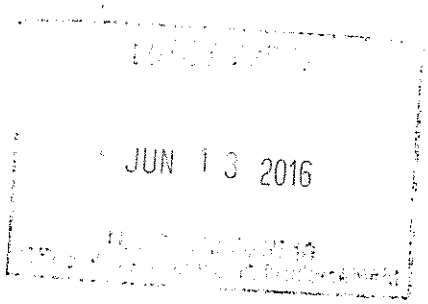
Photo No.46 – Kinross DeLamar Mine (Google Earth imagery date: 7/15/2016)
Land application site; the mitochondria-like structure is a remnant from historic dredge mining.

IDR050007
C-5

KINROSS

Kinross DeLamar Mining Company
P.O. Box 52
Jordan Valley, OR 97910
Tel: (208) 583-2511

June 7th, 2016



U.S. EPA Region 10
1200 Sixth Avenue, Suite 900
Attn: PCS Data Entry Team, OCE-133
Seattle, Washington 98101

RE: **Responsible Corporate Officer and Authorized Agents**
MPGP 2015 – ID# IDR050003

Dear Director:

This letter is submitted to provide notice as required under the General Requirements of the above referenced permit (Appendix B, Section B.11, subsection D) that I am now the responsible corporate officer of Kinross DeLamar Mining Company. Steve Smith, Environmental Manager-Reclamation Operations, Kinross Gold USA Inc.; Larry Perino, Site Manager-Reclamation Operations, Kinross Gold USA Inc.; and Kevin Roach, Director-Reclamation Operations, Kinross Gold USA Inc. are authorized agents for Kinross DeLamar Mining Company for the purposes of preparing and certifying all Kinross DeLamar reports, DMRs, and other matters relating to the permit. Contact addresses are as follows:

Mark Ioli
Kinross Gold USA, Inc.
363 Fish Hatchery Road
Republic, WA 99166

Steve Smith
Kinross Gold USA, Inc.
PO Box 52
Jordan Valley, OR 97910

Larry Perino
Kinross Gold USA, Inc.
PO Box 1
Silverton, CO 81433

Kevin Roach
Kinross Gold USA, Inc.
PO Box 52
Jordan Valley, OR 97910

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personal properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mark N. Ioli

Mark Ioli, President
Kinross DeLamar Mining Company

Cc: Idaho Department of Environmental Quality